

2017

The President Management Agenda: An Examination of Federal Employees' Perceptions

Famane Brown
Walden University

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Public Administration Commons](#), and the [Public Policy Commons](#)

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Famane Brown

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee

Dr. James Mosko, Committee Chairperson,
Public Policy and Administration Faculty

Dr. Mi Young Lee, Committee Member,
Public Policy and Administration Faculty

Dr. Linda Day, University Reviewer,
Public Policy and Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

The President Management Agenda: An Examination of Federal Employees' Perceptions

by

Famane Brown

MPA, University of Nebraska at Omaha, 2003

BS, Towson State University, 1983

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

August 2017

Abstract

Gauging the quality of the relationship between federal managers and employees and its impact on organizational performance excellence is a continuing problem for the federal Office of Personnel Management (OPM). President Barack Obama's President's Management Agenda mandated several actions to respond to the problem. Part of the mandate was to use data from the Federal Employee Viewpoint Survey (FEVS) to gauge the relationship between management and employees and overall performance. The FEVS is a tool that measures employees' perceptions of whether, and to what extent, conditions that characterize successful organizations are present in their agencies. The research question for the study was whether differences exist between the employees of higher and lower performing federal agencies as measured by the Engagement Index of the FEVS. The samples were controlled for sex, age, and education. Secondary data obtained from the OPM 2014 FEVS were obtained for the research. This quantitative study involved a nonexperimental, correlational, and descriptive research design. Multiple regression analysis determined differences among the dependent variables as portrayed within the high- and low-performing agencies. Descriptive statistics were used to summarize the demographic variables. Analysis results of the 2014 FEVS report determined that no difference existed between employees ($n = 258$) from higher and lower performing agencies as measured by the FEVS. The study contributes to positive social change by enabling agencies to determine where managerial changes are necessary for agency performance. Longitudinal studies using the FEVS can contribute to future improvements in federal agencies performance improvements.

The President Management Agenda: An Examination of Federal Employees' Perceptions

by

Famane Brown

MPA, University of Nebraska at Omaha, 2003

BS, Towson State University, 1983

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

August 2017

Dedication

This dissertation is dedicated to the love of my family. A special thank you to my husband Sam who suggested the topic to begin this journey and always shared his professional opinions. My sister Verna who provided words of encouragement continuously and supported me in every way possible. I appreciated the support of my children, Raphael, Omar, Alexis, and Selwyn who are proud of my accomplishment by acknowledging the undertaking and being there for me. I want to thank my girlfriends of 30 years who shared their words of reassurance. Lastly, I would like to praise God whom my private conversations with him always included the quote from the book of James, because you know the testing of your faith produces perseverance (James 1:3).

Acknowledgments

I would like to thank my parents, Albert and Lossinia, for instilling in me to be a strong woman and not to fear my challenges. Dad and Mom your countless hours of talks and dedication have paid off. Secondly, I would like to extend a special thank you to Dr. James Mosko, my committee chairperson for his voice of encouragement and expertise in the dissertation process. I also acknowledge and thank Dr. MiYoung Lee, committee member for her helpful comments and recommendations. Additionally, I appreciate the review and comments of my URR committee member, Dr. Linda Day. Finally, I would like to acknowledge Dr. Alma Yow who guided me in the right direction during my last steps of my dissertation process.

Table of Contents

List of Tables	v
List of Figures	vi
Chapter 1: Introduction to the Study.....	1
Introduction.....	1
Background of the Study	2
Problem Statement.....	6
Purpose of the Study	7
Research Questions and Hypothesis	8
Theoretical Framework.....	10
Nature of Study	10
Definitions.....	12
Assumptions.....	15
Theoretical Assumptions	15
Methodological Assumptions	17
Topical Assumptions	17
Scope and Delimitations	18
Scope	18
Organizational Diversity Climate	19
Delimitations.....	20
Limitations	21
Significance.....	21

Summary	22
Chapter 2: Literature Review	24
Introduction.....	24
Literature Search Strategy.....	24
Theoretical Foundation	25
Conceptual Framework.....	26
NPM and NPS.....	26
PMA	31
Literature Review Related to Key Variables	33
Highest Performers (Group A) Versus Lowest Performers (Group B):	
Independent Variables	33
EEI: Dependent Variable	34
HCAAF Index: Dependent Variable.....	40
GSI: Dependent Variable	42
NIQ: Dependent Variable	47
Controlling Variables.....	48
Summary and Conclusion.....	49
Chapter 3: Research Method.....	52
Introduction.....	52
Research Design and Rationale	52
Methodology	54
Threats to Validity	60

Ethical Procedures	61
Summary	62
Chapter 4: Results	63
Introduction.....	63
Data Collection	65
Results.....	66
Hypothesis 1.....	69
Hypothesis 2.....	71
Hypothesis 3.....	71
Hypothesis 4.....	72
Additional Test.....	72
Summary	75
Chapter 5: Discussion, Conclusions, and Recommendations	77
Introduction.....	77
Interpretation of the Findings.....	78
Research Question 1: What are the differences in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education?	78
Research Question 2: What are the differences in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education?	79

Research Question 3: What are the differences in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education?	79
Research Question 4: What are the differences in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education?	80
Limitations of the Study.....	81
Recommendations.....	81
Implications for Social Change.....	82
Conclusions.....	84
References.....	85

List of Tables

Table 1	<i>Overall Group B Lowest Engagement Percentages in 2010 and 2014</i>	35
Table 2	<i>EEI Percentages for Groups A and B</i>	38
Table 3	<i>FEVS Test of Homogeneity of Variances</i>	67
Table 4	<i>Descriptive Statistics</i>	67
Table 5	<i>Age, Gender, and Educational Level</i>	68
Table 6	<i>Mean and Standard Deviations</i>	68
Table 7	<i>EEI Group A_ ANOVA Model</i>	70
Table 8	<i>EEI Group B_ ANOVA Model</i>	70
Table 9	<i>Independent Samples Test</i>	73
Table 10	<i>Correlations</i>	74

List of Figures

Figure 1. Group A agencies rate highest by engagement scores	11
Figure 2. Group B agencies rate lowest by engagement scores.....	12
Figure 3. The conceptual framework	18
Figure 4. Result of G*Power sample size computation.....	56
Figure 5. P-P scatterplot.....	75

Chapter 1: Introduction to the Study

Introduction

In 2014, the second President's Management Agenda (PMA) mandated roles and responsibilities to strengthen the federal workforce and create a better organizational culture for the future (Obama, 2014). The Office of Personnel Management (OPM), as the leading agency to induct or foster these roles and responsibilities, used several tools for implementation. The main tool used to measure employees' perceptions about their work environment and behavior has been the Federal Employee Viewpoint Survey (FEVS). The focus was on improving employee engagement and mission performance. Although the OPM has continued to use the FEVS, its use has expanded the ability to acquire feedback regarding leaders, managers, and supervisors (OPM, 2014). The Federal Employee Viewpoint Survey has been in existence since 2002, and the OPM staffers have improved its inquires structure. The survey represents a substantial rate of participation, even though not every federal employee takes the survey. The 2014 survey produced 392,000 responses attesting to participants' work environment and behavior (OPM, 2014). The 2014 study illustrated the need to continue the survey to hear the voices of employees and to concentrate on improving ways to do their jobs better.

The 2014 FEVS data indicated that some agencies performed better than others did. Curing poor-performing agencies is a challenge for the presidential administration (OPM, 2014). The Obama presidential administration believed that one pillar of contention is people and culture. The focus of the PMA was on four pillars: (a) people and culture, (b) effectiveness, (c) efficiency, and (d) economic growth. The pillars

comprise the framework for finding solutions to promote a foundation to strengthen an organizational culture. Some public management practitioners have claimed policies established in the past are not conducive for the 21st-century workforce and promote disruption in growing an agency's culture for advancement (Michalski et al., 2008). This study involved examining the people and culture pillar and its significance to higher performing agencies versus lower performing agencies when addressing a culture of excellence in the federal workforce. The results of the study may help practitioners have a clearer understanding of the relationships between the PMA and the ways government works and delivers for citizens in the 21st century. A discussion about the results of the survey, its impact on the 21st-century government, and the challenges federal administration faces in building an excellent workforce continues throughout the study.

Background of the Study

The U.S. public administration's practices have recently experienced challenges regarding empirical data and theories that support administrative policies and practices. As President Obama's administration continued the efforts of closing the gaps about firm public policies changes, so did past presidents. Kettl (2002) stated that several past presidents acknowledged firm public policy foundations (e.g., in the hierarchies of Alexander Hamilton's strong executive beliefs, Woodrow Wilson's bureaucracy, James Madison's balanced architecture, and Thomas Jefferson's uncomplicatedness) established a traditional public policy for public management.

The application of those traditions has become a muddled combination of "maybe, or it depends on" (Lynn, 2001, p. 20). The phenomena of the new public

management (NPM) and the new public service (NPS) emerged in the 1980s in New Zealand (Denhardt & Denhardt, 2000). The NPM and NPS generated significant interest among public administration scholars, especially those experiencing federal workforce gaps in the 21st century (Denhardt & Denhardt, 2015). The NPM is a practice of public policies governance centered on customer satisfaction or citizens' demands. Public policy issues are supported by new public administration strategies (Denhardt & Denhardt, 2000) and less bureaucratic structures. The NPS is a model that involves commonality among values and engages citizens' voices (Denhardt & Denhardt, 2015). As public administration practitioners use President Obama's second management agenda, resilient examples of the NPM and the NPS practices would create healthier workforce.

Essential elements of the NPM include strategic planning, incentives, flexibility, and obtaining credible results. Frederickson, Smith, and Larimer (2011) noted that the notion of the NPM represents less protest for social equity, which is a prescription for good government. The primary focus of the NPS is citizens (Denhardt & Denhardt, 2015). For example, the social equity theory, represented by the NPM, became successful in the 1960s and 1970s because its supporters used it to frame fairness in the workplace, equal employment opportunities, and affirmative action (Frederickson et al., 2011).

Because researchers consider management as the nucleus of public administration, the public management theory became a primary focus in the mid-1980s. One known theory, the principal-agent theory, focuses on political bureaucracy and its impact on administrative practices (Frederickson et al., 2011). Other public management theories include the new managerialism, a product of the NPM, which gained wide

acceptance in the business line of management or total quality management (Frederickson et al., 2011). However, management rarely practices total quality management and the NPM business lines completely.

Frederickson et al. (2011) and Kettl (2002) believed the NPM movement about governance is debatable in terms of whether governance is better when citizens demand less central authority or hierarchical structure to combat every issue. Whereas, the public and private sectors do not differ in opinion when addressing money, people, expertise, and technology. Citizens depend on the leadership of the organization and leaders' expectations of their employees to practice the given policies and procedures, to nurture society. Kettl (2002) understood the NPM and governance through the ways individuals connect society with public and private sector organizations. However, other scholars have debated the relationship between the NPM and governance, as addressed next in the public choice and public-private partnership section.

Adam Smith, author of *The Wealth of Nations* published in 1776, was one of the first scholars who prescribed the meaning of public choice and its theory (Frederickson et al., 2011). Smith promoted self-interest as a beneficial notion in his economic theory. Because theory practices are prevalent in public administration, it is important to align theory with the purpose of the cause (Frederickson et al., 2011). Public choice theory includes an interrelationship of organizational, economic, and rational choice theories that all support the notion of self-interest (Frederickson et al., 2011). Public choice theorists have indicated that when an individual focus on the social-economic goals of government (i.e., people and culture), then public choice provides an employee the choice

to heighten all efforts to reach optimum goals of economic growth and self-preservation (Bovaird & Loffler, 2009).

Bovaird and Loffler (2009) noted a significant investment should occur in public–private partnerships with both public and private entities (i.e., contractors). These favorable practices help narrow the gaps in services once partnerships are established and risk-taking becomes a shared practice. When a contractor’s expertise improves support for a public worker’s project, economies of scale are produced (Bovaird & Loffler, 2009). However, some scholars have claimed the opposite about public–private partnerships because some leaders do not want to share their patent practices. Sharing patent practices with public organizations due to the bureaucratic structures involved could cause fragmented practices (Bovaird & Loffler, 2009).

During the mid-1990s, strategic management introduced several methods where the NPM is supported under public–private partnerships. Leaders of public organizations became advocates for joint ventures and consortia, which enhanced partnerships, collaborations, and competitive advantages (Bovaird & Loffler, 2009). Researchers have shown that collaboration techniques within public and private organizations bring about successful organizational outcomes when managing the public good (Bovaird & Loffler, 2009). As with any practice, collaboration techniques do not solve all problems with public practices, but collaboration techniques do provide federal managers with options to fix issues and promote organizational excellence.

Problem Statement

The NPM is a relatively new approach to federal governance. The NPM methodology is the opposite of traditional forms of public administration. Public management scholars have shared different viewpoints on the NPM. For example, Behn (1995) focused on the lack of empirical science, and Kaboolian (1998) noted that the NPM fosters well-developed performance measures that could create a report card for accountability. The platform for the NPM creates flat hierarchies, eliminates competition as an incentive for work, and demands good public management (Frederickson et al., 2011).

The public choice theory expands the notion of the NPM through a focus on less bureaucracy and more competition in the production of services needed in the government (Buchanan, 1984). However, there is a gap in the literature, and research that is more empirical is necessary to confirm or reject the assumptions of public choice theory and the NPM's platform. The literature should focus on public management issues in the 21st century relating to people and culture. People and culture was one of the methodologies in President Obama's (2014) second-term management agenda, which mimicked the business practices of the NPM.

The primary focus of this study was to explore President Obama's (2014) goal for people and culture to identify the potentiality of the workforce and recommend practices to build an adaptable workforce. The FEVS, provided by the OPM, measures the extent to which federal agencies transform in the dimension of employee empowerment and broader cultural change (OPM, 2016). The president's doctrine of reinvention of the

federal government addressed people and culture across agencies, and the FEVS data offered examples of organizational excellence and a more rewarding platform for the future workforce (Obama, 2014; OPM, 2016).

The power of the president is a key concern for all of those studying public administration. Theorists have sought to find the perfect amount of power dedicated to the president and to understand what sort of duties and responsibilities acting as president entails. For instance, Fatovic (2004) explored the two drastically different Jeffersonian and Hamiltonian traditions and their reactions to the prerogative of presidents to make decisions without legal clearance from any other authority. Fatovic also explored whether this prerogative was necessary and constitutional. Hamilton emphasized active and sufficient power was indispensable to the preservation of liberty for the people (Fatovic, 2004).

Public administration scholars have continued to debate whether the president should continue to have the executive ability to steer public management policies and procedures, especially with regard to issues in the 21st century. One purpose of this research was to provide an analytical perspective on several steps the U.S. president has taken by using the management agenda to require a change not only to management (leadership, managers, and supervisors) but also to how the country's workforce may improve.

Purpose of the Study

The purpose of this study was to investigate, analyze, and determine whether a correlation existed between the employees of higher and lower performing federal

agencies. The higher and lower performing federal agencies were identified on an engagement quintile chart in the 2014 Federal Employee Viewpoint Survey Results from 2010 to 2014 (OPM, 2014, p.15). More specifically the higher and lower performing federal agencies listed on the engagement quintile chart were measured by the four indices of the FEVS, namely, the Employee Engagement Index (EEI), Human Capital Assessment Accountability Framework (HCAAF), Global Satisfaction Index (GSI), and New Inclusion Quotient (NIQ), when controlling for gender, age, and education. The aim was to determine whether the variables of gender, age, and education show a correlation between two groups of federal agencies.

Research Questions and Hypothesis

Four research questions and associated hypothesis statements formed the basis for this study. They are the following:

Research Question 1: What are the differences in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education?

H_01 : There is no difference in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_a1 : In Groups A and B, there are differences in the EEI while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

Research Question 2: What are the differences in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education?

H_{02} : There is no difference in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a2} : In Groups A and B, there are differences in the HCAAF while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

Research Question 3: What are the differences in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education?

H_{03} : There is no difference in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a3} : In Groups A and B, there are differences in the GSI between federal agencies while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

Research Question 4: What are the differences in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education?

H_{04} : There is no difference in the NIQ index between federal agencies, Group A, and Group B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a4} : In Groups A and B, there are differences in the NIQ index while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

Theoretical Framework

In the 21st century, the NPM has experienced several attempts at government reform by public management theorists, but the NPM practices across the government do not exist. The NPM relates to the public choice theory, and public choice theory provides the relationship between government and society (Kettl, 2002). The research involved investigating agencies using the FEVS EEI, which reveals high-achieving agencies and low-performing agencies, to explore their relationship with the nonhierarchical the NPM versus the hierarchical style of the old public administration. This exploration indicated how changing the people can lead to changes in the culture and ultimately the organization.

Nature of Study

This study was a nonexperimental quantitative design derived from secondary data collected using a survey tool for the study. This quantitative study involved a nonexperimental, correlational, and descriptive research design. Quantitative research is a type of study in which the objective is to explain a phenomenon by collecting numerical data and analyze the data using statistics (Pulido-Martos, Augusto-Landa, & Lopez-Zafra, 2012). A quantitative study is suitable when the objective of the study is to investigate relationships between two or more variables measured numerically (Babbie, 2012). Secondary data included data from the 2014 FEVS to understand the relationship between higher performing agencies and lower performing agencies, especially when exploring the four assigned indices in FEVS.

The questions and responses were selected from the OPM (2016) to establish if a correlation exists between higher and lower performing agencies and the four FEVS indices using gender, age, and education as controlling variables. Researchers conducting studies with a quantitative design can include “numeric descriptive” (McNabb, 2015, p. 20) data to provide significant or nonsignificant testing results. The independent variables are the responses from the agency types (Groups A [seven agencies] and B [nine agencies]; Figures 1 and 2). The dependent variables are the four indices EEI, HCAAF, GSI, and NIQ.

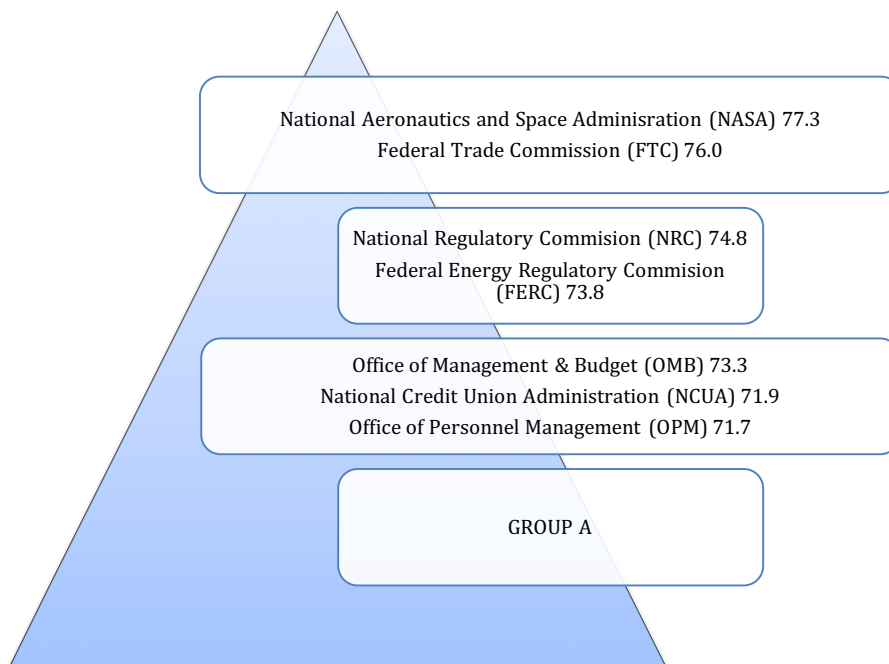


Figure 1. Group A agencies rate highest by engagement scores.

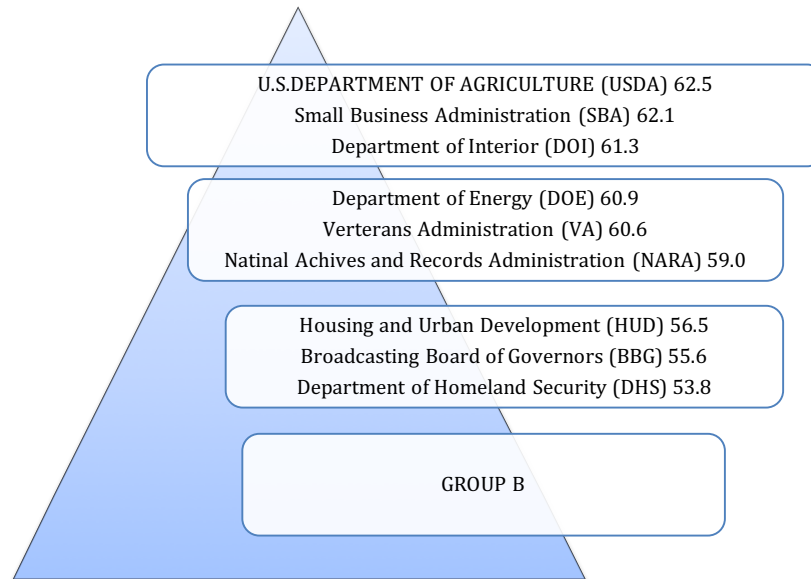


Figure 2. Group B agencies rate lowest by engagement scores.

Definitions

The operational definitions used in this study are as follows:

Agency type: Agency type refers to civilian or military federally funded organizations that range from large to small departments or agencies or independent agencies (OPM, 2014).

Demographics: The five demographic variables were (a) gender (male or female), (b) supervisory status (Senior Executive Service (SES) or equivalent, supervisor, and nonsupervisor), (c) federal tenure (less than 3 years to more than 20 years), (d) age (less than 25 years to more than 60 years), and (e) minority status (minority or nonminority; OPM, 2014).

Diversity management: Diversity management consists of a construct that develops organizational policies, systems, and processes devoted to people from diverse backgrounds working together (Fernandez, Resh, Moldogaziev, & Oberfield, 2015).

Education: Education is a control variable that appeared for the first time in FEVS; the survey measures education to address some of the challenges in federal government focused on hiring qualified employees and retention (OPM, 2014).

Employee empowerment: Employee empowerment consists of shared notions (i.e., allowing employees decision-making ability, which influences the organization) that managers support by allowing employees to improve their organization's performance (Fernandez et al., 2015).

Employee Engagement Index (EEI): Three factor models make up the EEI to differentiate between satisfaction and engagement. The factors are leaders lead, supervision, and intrinsic work experience and conditions conducive to employee engagement (OPM, 2014).

Federal Employee Viewpoint Survey (FEVS): The FEVS is a web survey launched in two phases to federal employees since 2002 to collect and analyze data about federal public servants' viewpoints on what constitutes a successful organization (OPM, 2014).

Generations: The federal employee population consists of four generations: veterans (born between 1926 and 1945), baby boomers (born between 1946 and 1964), Generation X (born between 1965 and 1981), and millennials or Generation Y (born between 1982 and 2003; Fernandez et al., 2015).

Global Satisfaction Index (GSI): Four aspects constitute the GSI through employees' viewpoint: their job, their pay, their organization, and if they would recommend their organization as a good place to work (OPM, 2014).

Human Capital Assessment Accountability Framework (HCAAF): The law provides a policy to address the performance metric under the HCAAF. The four indices that comprise the HCAAF are leadership and knowledge management, results-oriented performance culture, talent management, and job satisfaction (OPM, 2014).

Intrinsic work experience: Intrinsic work experience has an association with the EEI, where employees express their feelings of motivation and competency related to the workplace. Questions 3, 4, 6, 11, and 12 on the FEVS captured this information (OPM, 2014).

Leaders lead: Leaders lead represents an employee's viewpoint on how well a leader is leading (OPM, 2014).

Management cross-agency priority goals: The management cross-agency priority goals represent four major priorities that have expanded into eight subgroups representing President Obama's (2014) management agenda. The four top priorities are efficiency, effectiveness, economic growth, and people and culture (Obama, 2014).

Millennials: Millennials, also known as members of Generation Y, represent the fastest growing group of employees entering the federal workforce, and they tend to believe more in innovations (Fernandez et al., 2015).

New Inclusion Quotient (NIQ): The NIQ consists of a positive habit of behaviors repeatedly practiced by employees and improves workplace inclusion by building on

organizational performance. The five habits of practice are fair, open, cooperative, supportive, and empowering (OPM, 2014).

People and culture: People and culture represents the PMA by promoting the use of all possible notions to improve and support federal employees' potential for the future workforce (Obama, 2014).

President's Management Agenda (PMA) or Obama's management agenda: In this study, the terms *PMA* and *Obama's management agenda* are interchangeable and have the same meaning.

Supervisors: Supervisors are managers who advocate for an organization by recruiting, promoting, retaining, rewarding, and addressing performance appraisals of federal employees (OPM, n.d.).

Work-life programs: Work-life programs include a focus on assisting employees by providing options to balance work and life or family events (e.g., telework, alternate work schedule, employee assistance program, health and wealth program; OPM, 2014).

Assumptions

The study included several theoretical, methodological, and topical assumptions.

Theoretical Assumptions

This study involved an attempt to capture what element supports the PMA, especially the people and culture pillar. Learning more about what creates a stronger federal workforce and planning for an improved future workforce have connections to diversity management interventions, employee empowerment, and employee engagement because the range of organizational phenomena covers leadership styles, performance

management, equity and fairness, diversity management, change and innovation, turnover, and employee attitudes (e.g., job satisfaction; Fernandez et al., 2015).

Researchers must narrow the research approach and focus on diversity management, employee empowerment, and employee engagement. Soni (2000) recognized that human resource priorities must include and enforce diversity management in organizations.

This study included an assumption that a highly diverse federal workforce promotes positive organizational outcomes. The adoption of diversity management in the public sector has mitigated social problems while providing federal employees the ability to explore new opportunities (Fernandez et al., 2015). Given that the organizational diversity climate represents the conceptual framework, there is an assumption that participants rate diversity management favorably in the survey for all agencies (Fernandez et al., 2015, p. 387).

Employee empowerment is a method in which supervisors and managers ask employees to share their ideas or methods to solve a problem or assist with a decision-making process. This method of decision making casts out the bureaucracy practices and enforces collaboration. Hersey and Blanchard (1982) noted that some scholars contended that this method was only valuable when one found employees with high levels of developmental skills. In contrast, Blanchard, Zigarmi, and Nelson (1993) indicated that lower developmental skills worked as well because employees benefit from empowerment leadership.

Employee engagement played a significant role in this study and represented a practice that is becoming more noticeable in the public workforce culture. One of the

findings in the FEVS (OPM, 2015) validated the majority of the surveyors; for example, 96% of respondents felt devoted to their mission and remained willing to make an extra effort to complete a project (p. 88). Employee engagement is a fundamental element in the management agenda because it is the center of the culture of excellence (OPM, 2015, p. 89). Employee engagement practices represent a top priority for engaging leaders to determine that management hears the right employees' voices and implements these ideas.

Methodological Assumptions

A premise of this study is two methodological assumptions. According to Levasseur (2011), quantitative research can derive from secondary data collected using a survey tool design for the study. In that regard, the first methodological assumption of the study was that a nonexperimental research approach would represent the tested data using deductive methods to support the theory or suggestions to revise the theory. Second, because the FEVS is a self-administered web survey, there was an assumption that the respondents would remain honest and willing to provide answers to the best of their ability.

Topical Assumptions

As part of the people and culture initiative in President Obama's (2014) management agenda, piloting workforce ideas to improve diversity management, collaboration, and employee empowerment suggests that those elements support a satisfying workforce (Fernandez et al., 2015). This study included an assumption that

there is proof that some agencies can maintain the distinction of being a high-scoring agency from year to year, whereas low-scoring agencies lack piloting workforce ideas.

Scope and Delimitations

Scope

There are other significant factors present to improve employees' perceptions about their agencies and their organizations' performances. Some ways to explore the empirical findings include factoring in the PMA, specifically about people and culture, and gauging the indices outcome in FEVS. Fernandez et al. (2015) revealed that job satisfaction and satisfaction with pay represent two major barometers of testing organizational climate. Therefore, employee empowerment rates highly as a factor of employee satisfaction levels.

Public management research and theory using the FEVS data has advanced scholarly findings, especially when focusing on employee empowerment and diversity management (Fernandez et al., 2015). The indices provide a better understanding of the data regarding why Groups A and B differ (examining gender, age, and education) and why employee empowerment and diversity management create an organizational diversity climate (Fernandez et al., 2015). A conceptual framework appears in Figure 3 that explores the correlation in an organizational diversity climate between the indices by focusing on employee empowerment, employee engagement, and diversity management and by supporting the PMA for people and culture.

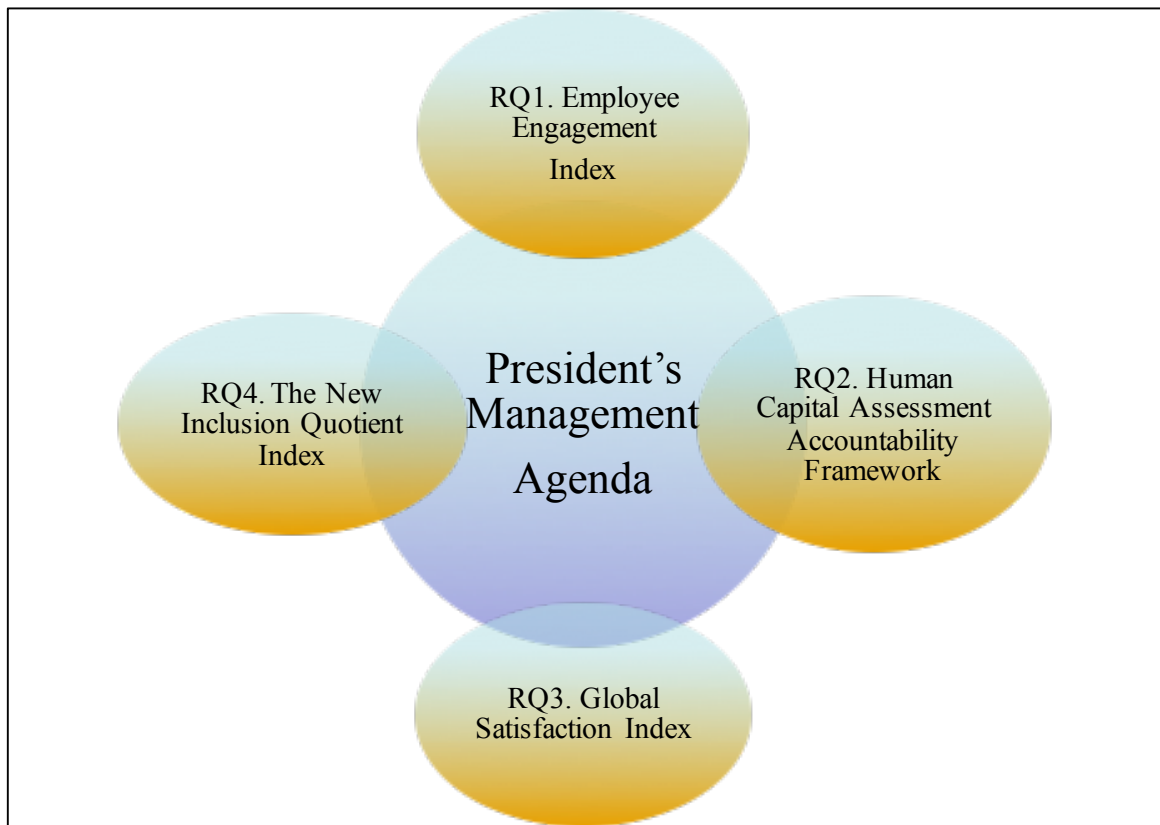


Figure 3. The conceptual framework.

Organizational Diversity Climate

Figure 3 indicates how the stage for public management has evolved through employing the NPM practices by implementing presidential mandates, diversity management programs, employee empowerment, and engagement techniques. Answers to the research questions indicated what correlated factors would improve organizational performance. Fernandez et al. (2015) noted employee empowerment dates back to the human relation movement, which is a key feature of the NPM development. Now known nationwide, the diversity concept is becoming popular in federal agencies; most federal agencies have instituted some type of diversity-management initiative (Kellough & Naff,

2004; Pitts, Hicklin, Hawes, & Melton, 2010; Soni, 2000). The diversity climate of an organization “influences employees’ receptivity to diversity and diversity management initiatives of the employer” (Soni, 2000, p. 20).

In this study, the elements of the PMA, specifically for people and culture, employee empowerment, employee engagement, and diversity management, can align with the validation of why Group A’s scores were higher than Group B’s scores when testing the indices’ demographics.

Delimitations

Using surveys as a tool to gather the data raises questions about biases, validity, and reliability approaches. The organization of questions is necessary to reduce the practice of data collection error, such as ignoring bias (Sanchez, 1992). Within the FEVS, participants had five choices, starting with 1 = *strongly disagree* and ending with 5 = *strongly agree* (i.e., this organization of choice may exhibit bias).

From 2002 through 2013, the OPM leaders did not report on how they planned to improve the survey’s validation or reliability, even though some researchers made several recommendations (OPM, 2014). The survey captured a large volume of valuable data. Researchers at the OPM (2014) have continued to initiate changes to the survey by adding or deleting sections or revamping questions. Even though the survey started out as a human capital management assessment tool (Callahan, 2015), the outcome creates a major human capital data repository for the federal government.

Limitations

Limitations were present in this study. First, the survey administration followed the 2013 federal government shutdown (Parker, 2014) and employees felt nervous about the stability of the federal government and their ability to spend. There was a strong possibility federal workers' responses reflected bias, resentment, and frustration about public policy and its impact on their future.

Second, the lack of deep analysis of millennials, who will represent a high percentage of government personnel within the next decade, creates a risk of earlier unknown trend setting. Incorporating a trend study in the FEVS can help public management scholars predict the probability of the NPM enhancements. This limitation of unknown trend setting prevents the analysis of other phenomena, such as how increasing numbers of millennials in the government require higher education statuses to build a smarter and more efficient government. The survey data set included a section on millennials in the workforce, but there was no trends analysis discussion solely dedicated to millennials and their future engagements.

Third, the survey only went to the U.S. federal workforce; therefore, researchers cannot compare or contrast it to any other labor force. Lastly, the data can only support a nonexperimental quantitative research due to the nonrandom population. Hence, the results pose no threats.

Significance

The significance of this study to the NPM and people and culture is that the results can help practitioners have a clearer understanding of the relationship between the

President Obama's (2014) management agenda and improving how government works and delivers for citizens in the 21st century. By focusing on people and culture, I also examined the significance of higher performing agencies versus lower performing agencies, especially when addressing a culture of excellence in the federal workforce.

Summary

This dissertation consists of five chapters. Chapter 1 included an introduction to the problem, which is the effect of the NPM approach and the pillar of people and culture in using President Obama's (2014) second management agenda for the U.S. federal workforce. This chapter also included the purpose, rationale, and significance of this quantitative research and an analysis of the 2014 FEVS. People and culture represent organizational issues that are critical facets for federal agencies of the U.S. government. The results of this study may provide more of an understanding of the effect of people and culture in the government workforce by improving each agency's perception of advancement to better the organization's excellence level.

Chapter 2, the literature review, consists of three themes to provide clarity on the theoretical foundations and conceptual framework of this study. The first theme includes an introduction to the FEVS with a focus on people and culture by addressing the four indices EEI, HCAAF, GSI, and NIQ (dependent variables) and the independent variables in Groups A (seven agencies) and B (nine agencies). Group A was representative of highest successful engagement scores, while Group B was representative of the lowest. The controlling variables of age, gender, and education establish certain empirical data about the two groups. The second theme addresses the impact of the NPM, NPS, and

public choice theory. The final theme includes employee empowerment, diversity management, and business cases, which support the adoption of more diversity programs and job satisfaction experimentation to produce better performing organizations.

Chapter 3 includes a discussion on the quantitative research methodology used to measure the demographic dimensions on the president's goal for people and culture to identify the potentiality of the U.S. federal workforce. This chapter includes an explanation of the hypotheses developed for this research, the sample ($n = 141,540$, Groups A and B totals; whereas, 2014 FEVS sample equated to 392,752 employees; (OPM, 2014), all variables, and statistical itemizations. Finally, Chapter 3 indicates how the study took place, the analysis techniques and tools used, and the steps taken to ensure reliability, validity, privacy concerns, and explanation of limitations.

Chapter 4 includes the quantitative analysis of the data collected from the sample and the reviews of the hypothesis testing. This chapter also includes a discussion of the operationalized concepts of higher performing agencies versus lower performing agencies. Chapter 5 includes summaries of the research results, conclusions from the data analysis, and future research possibilities. Chapter 5 also contributes practical and theoretical concepts of the study toward empowering people and diversity management in the federal government.

Chapter 2: Literature Review

Introduction

The goal of the “Delivering A High-Performance Government” document (Office of Management and Budget [OPM], 2015) and President Obama’s (2014) management agenda was to improve how government works and deliver practical policies to U.S. citizens in the 21st century, and this goal sets the stage for this chapter. These documents represent the causation and the primary elements for the research. The focus of the literature review was on the relationship between the assigned Groups A and B agencies, using the FEVS EEI scores by their departments (OPM, 2014, p.15). The higher performing agencies, seven agencies, created a culture of excellence and engagement within their organizations. Whereas Group A agencies became statistically significant enablers of the low-scoring and performing agencies in Group B, nine agencies. This was suitable for a particular literature strategy to feature and address new public administration processes and policies for the future government workforce while improving U.S. citizens’ engagement.

Literature Search Strategy

The literature search strategies included reviewing scholarly studies, political articles, and governmental studies that related to the four dependent variables (EEI, HCAAF, GSI, and NIQ) and the independent variables (Groups A and B). The structure of the literature review aligns with the research questions derived from the FEVS (OPM, 2014). Based on the four indices in the research questions, the focus of the major themes

was on public choice theory, NPM, NPS, PMA, employee empowerment, and diversity management. The research revealed gaps in the literature.

Theoretical Foundation

Buchanan and Tollison (1984) noted that public choice explains political conversations, government, and government processes. Public choice literature is popular in economics and political journals (Buchanan & Tollison, 1984). Buchanan and Tollison first introduced the concept of public choice. Even though European countries seem more engaged with public choice theory, more U.S. public administration scholars have used empirical data to align their findings with economic market concepts to support the NPM practices (Kaboolian, 1998). Public choice theory describes the behavior of actors in government. Tullock, Brady, and Seldon (2002) noted that during the 19th century and extending into the 20th century, economists viewed people as devoted to their own interest.

Defining public choice theory involves defining economic theory, which entails the study of the U.S. economy in the marketplace. Buchanan and Tollison (1984) noted that researchers who apply public choice theory analyze the behavior of individuals creating or doing market actions such as buying, selling, producing, investing, and establishing an entrepreneurship for the good of the community. Public choice theory includes the foundation of economic theory, which describes the behavior of the government actor as the voter, candidate for office, and elected officials and leaders of political offices (Buchanan & Tollison, 1984). The public choice theory supports “different kinds decision rules or decision situations which creates different approaches

to choice making” (Denhardt & Denhardt, 2015, p. 8). The way rules are constructed affect “human choice and then it affects human behavior”, these are key principles that support public agencies governance (p. 8).

Some public choice scholars noted that bureaucracy overthrows legislative processes for the good of the entity and not the people (Buchanan, 1984). Therefore, democratic behavior becomes absent and manipulation powers increase. Public choice scholars have posited that empirical data demonstrated that the outcomes of government are out of control (Buchanan, 1984). When the powers of bureaucracy manipulation take over government, researchers have posited that governments are “exploiters of citizenry” (Buchanan, 1984, p. 20). Lastly, Buchanan (1984) noted public choice theory represents a reason why, “an explanation, of complex institutional interactions that go on within the political sector” (p. 20). This theory helps public administration researchers understand why there is a gap between Group A and B performance outcomes in accordance with the FEVS data.

Conceptual Framework

NPM and NPS

The NPM, which is a more recent theory in the history of public administration, derived from the concept of applying business and private sector approaches to the public sector (Denhardt & Denhardt, 2015). The goal of this approach is to improve performance in public sector organizations by emulating the business sector by prioritizing performance, cost, efficiency, and accountability in an organization’s underpinnings (Denhardt & Denhardt, 2015). In general, the reception of the NPM has

been mixed. Some have argued that it is not actually new, but rather an amalgam of earlier theory and practice, whereas others champion it as a uniquely new paradigm (Denhardt & Denhardt, 2015).

Those who have indicated that the fall of orthodox public administration was both internal and external began labeling practices as unscientific and political (Denhardt & Denhardt, 2015). They disproved the politics–administration dichotomy by claiming, “All administrative agencies and their staffs seemed to be involved in politics” (Sayre, 1958, p. 103). The unscientific claim that, unlike science, which is based on facts, logic, and data, orthodox public administration was built on emotions, void of logic, lacked doctrine, and created a culture of its own, followed this attack (Sayre, 1958).

The attacks on the orthodoxy by iconoclasts of the 1990s set the stage for the NPM, which “refers to a cluster of ideas and practice that seek, at their core, to use private-sector and business approaches in the public sector” (Denhardt & Denhardt, 2000, p. 550). The rise of the NPM changed the face of public administration; it was adopted with relative ease by New Zealand first and then by Great Britain, which eventually helped privatize public services to corporations (Frederickson et al, 2011, Denhardt & Denhardt, 2015). Some saw the tenets of this new movement as an affront to democratic principles, void of accountability, and an anathema to the values embedded within the constitution ranging from justice, representation, and government participation by citizens (Denhardt & Denhardt, 2015, p.20).

The inception of the NPM into the mainstream of U.S. public administration marked a critical juncture in the system tantamount to those experienced throughout its

evolving history. As a major notion of the NPM practice government must engaged with activities that lack the guidance of privatization or contracted out, these acts should be employed to give citizens choices in receiving their services (Denhardt & Denhardt, 2015, p.24) Although not necessarily rudimentary in its conception, the NPS aimed to return the management of public goods and the provision of service to the public administrator (Denhardt & Denhardt, 2015, p.84). At its core, the NPS derives from the Jeffersonian-Wilsonian tradition of the bottom-up approach to governance coupled with citizen participation (Kettl, 2002, p.109). Rather than the steering mentality of the NPM, the goal of the NPS in some respects is to serve the public.

Denhardt and Denhardt (2000) defined the NPS as “a movement built on work in democratic citizenship, community and civil society, and organizational humanism and discourse theory” (p. 549). Ingraham, Rosenbloom, and Edlund (1989) provided another definition of the NPS, which defined this new concept from the perspective of the administrator:

The New Public Administrator is one who must attempt, however inadequately, to understand the relationship of his own values and motives to questions of public policy, and to create a climate in which those to whom he is legally responsible are encouraged to do likewise and to assert their values in the political arena. (p. 116)

Arguments made by proponents of the NPM over efficacy or lack thereof in the public administration often centered on high levels of bureaucratic management, which means the bureaucracy has created its own culture and its own mission and uses levels of

asymmetry of information to stay afloat (Ingraham et al., 1989). Advocates of the NPM have suggested that government functions should adopt laissez-faire market ideals, which produce efficiency at the expense of creating high levels of negative externalities (i.e., resource depletion, deforestation, labor abuse, and low levels of accountability) (Ingraham et al., 1989, p. 120). However, as administrators or the administration reflect the public and have direct contact to and with the public, they are inadvertent participants, which creates self-consciousness, and thus, “their differential status and or disadvantages in society retain attitudes related to their social backgrounds and sometimes act upon them in their administrative settings” (p. 120).

Osborne and Plastrik (1997) noted that replacing bureaucracy represents a major thought process for the public sector. The return-to-community and civil-society-based models are attempts to reinvigorate old Jeffersonian ideals of government for and by the people that serves the public interest. Since the creation of the Bill of Rights and the continual delegation or devolution of governmental authorities from federal to state to local governments, it has become the responsibility of these governments to support and maintain their respective communities (Osborne & Plastrik, 1997). Therefore, these communities are representations of the civil society “where people need to work out their personal interests in the context of community concerns” (Denhardt & Denhardt, 2015, p. 20), which can involve dialogues and referendums. Hence, Denhardt & Denhardt (2015, p. 42) stated the NPS has created new norms to reflect its mixture of old and new thinking into seven guided lessons:

- serve rather than steer;

- public interest is the aim, not the by-product;
- thinking strategically;
- serve citizens, not customers;
- accountability is not simple;
- value people, not just productivity; and
- value citizenship and public service above entrepreneurship.

To summarize the statements of practitioners of the NPS, because administrators are, in effect, reflections of the diverse U.S. society, they must not only work to implement policies with due diligence, but they must also share their unique power with the public by working with them (Boyle & Whitaker, 2001; Denhardt & Denhardt, 2000; Ingraham et al., 1989). This can be done via referendums, which promote public participation and discourse; in doing so, practitioners of the NPS are reestablishing themselves through the constitution and Congress, as the de facto and de jure fourth branch of governance (Boyle & Whitaker, 2001; Denhardt & Denhardt, 2000; Ingraham et al., 1989).

The change to the NPM led to an increased push for agencies to be compliant and efficient. Accountability is a large contributor to efficiency (Finer, 1941). However, there are some public administration scholars who question what constituted the NPM practices. U.S. citizens are the focus and customers of the federal government; politicians are the rule makers. It is their job to ensure the government exists for the good of the people.

Finer (1941) discussed how politicians can abuse such power when there is little oversight or a lack of control. Agencies have discretion when carrying out policies created by the legislative branch (Calvert, McCubbins, & Weingast, 1989). Bureaucratic policy making does not include descriptive terms; instead, they leave interpretation up to the agencies to implement these laws as they see fit, as long as the outcome remains relevant to what Congress and the president expect (Calvert et al., 1989). With such discretion, organizations have identified loopholes in policies and changed the outcome to reflect agency goals instead of policy goals (Calvert et al., 1989).

It is human nature to provide policies and authorities in a hierarchical manner (Frederickson et al., 2011). Coming from top-level management, senior leaders distribute policies down to the lowest level possible. In contrast, the NPM actors look at responsibility from the bottom up (Finer, 1941). Government leaders need to start somewhere with changing current processes regarding accountability, learning the levels of accountability, and understanding who they would fall on. Monitoring helps, but sometimes employees need to take the lead as well.

PMA

In President Obama's (2014) second term, he demanded more statistics on improving the federal government workforce's engagement with citizens and their organization. To promote this initiative, he wrote certain requirements to fulfill his management agenda, more specifically the cross agenda priority, people and culture. In his first term, President Obama introduced initiatives of transparency that affected several

areas of government operations and allowed citizens as well as business owners to be aware of the latest technology in government (OPM, 2015).

President Obama (2014) focused on four pillars in the government: efficiency, effectiveness, economic growth, and people and culture. Memorandum M-15-04 listed several steps for why there is a need to strengthen employee engagement to improve organizational results across agencies (OMB, 2014). The M-15-05 document could definitely be used as reference tool for senior leaders and management. The federal workforce has continued to increase the numbers of workers, which surpassed 2 million in 2016 (School of Public Affairs, 2016). As the OPM and the American University, School of Public Affairs are collaborating to use data research to assist with shaping federal government for the future, public administrative scholars anticipate a broader perspective (School of Public Affairs, 2016).

This study focused on one of the four PMA pillars: people and culture. The study may have also provided another explanation regarding why the FEVS tool is becoming popular among public management actors and scholars as a secondary tool to measure agencies' productivity. The independent and dependent variables chosen for this study illustrated whether the correlational findings indicated why Group A's workplace was more desirable than Group B's workplace.

Literature Review Related to Key Variables

Highest Performers (Group A) Versus Lowest Performers (Group B): Independent Variables

Group A (highest performers; see Figure 1) includes large agencies that rated highest in the EEI scores reported by the FEVS 2014 data (OPM, 2014). Some of the agencies in Group A repeated their ranking in the FEVS 2015 survey by addressing employee engagement. Organizations such as the National Aeronautics and Space Administration (NASA), the Federal Trade Commission (FTC), the Nuclear Regulatory Commission (NRC), the Federal Energy Regulatory Commission (FERC), and OMB repeated their success as top performers in the FEVS 2015 survey (OPM, 2014) and ranked outstanding for being innovative organizations in 2015 (Moore, 2015). The trend occurred with the same large agencies in the FEVS 2013. Small and independent agencies also rank highly in employee engagement, but due to the abundance of data, the focus of this study was on the large agencies ranking highest and lowest.

Group B (lowest performers; see Figure 2) includes the large organizations that rated the lowest in EEI the scores reported by the FEVS 2014 data (OPM, 2014). The survey showed some improvement with three of the lowest scoring agencies in the 2015 FEVS. U.S. Department of Agriculture reached 64% from 62.5%, the U.S. Department of Energy reached 64% from 60.9%, and National Archives and Records Administration (NARA) reached 63% from 59.0%. The improvements meant the leaders of these agencies made changes in their organizational practices to address employees' satisfaction and commitment.

The FEVS tool continues to influence all federal agencies, regardless of their size. The PMA continues to provide the framework for the FEVS data research. As the author and collector of the data, the OPM has continued to add rigorous structure with intentions to access the root causes of why agencies struggle with performance outcomes. Agencies under groups A and B may report findings to determine what sustains positive or negative change in agencies and how an agency maintains its status. The seven higher performers and nine lowest performing agencies are the independent variables that I used to examine the dependent variables: EEI, HCAAF, GSI, and the NIQ. The following paragraphs include detailed discussions of the dependent variables.

EEI: Dependent Variable

The 2014 FEVS is the fourth yearly version of the survey; surveys prior to 2010 took place every 2 years. The administration felt the data would help to improve agencies' performance if the reviews and shared data were more frequent. Employee engagement reflects employees' "sense of purpose that is evident in their display of dedication, persistence, and effort in their work and their overall dedication to their organization's mission" (Obama, 2014, p. 2).

President Obama (2014) expressed a strong conviction to not only have the right people serve in certain positions, but also to empower people to provide feedback to address issues. The EEI has three sub factors: leader's lead, supervisor, and intrinsic work experience. Five questions support each sub factor using six response categories: *strongly agree, agree, neither agree nor disagree, disagree, strongly disagree, and no basis to judge/do not know* (OPM, 2016). The findings did not include the last response category,

no basis to judge/do not know. Leader's lead and intrinsic work experience increased by 1% from 2014 to 2015 (OPM, 2014). The 1% increase is critical because the 2013 FEVS reported decreases in two sub factors. Intrinsic work experience had a (69%-68%) 1% decrease and leader's lead (53%-50%) a 3% decrease (OPM, 2014), the supervisor factor increase by 1% (OPM, 2014). The FEVS data sent a clear message to the supervisor that they have showed improvement in 2015. In Group A, five of the seven top-performing agencies repeated their success (NASA, FTC, NRC, OMB, FERC) from the 2013 FEVS to the 2014 FEVS (OPM, 2014). Group B, which comprised the lowest scoring agencies, also had repeaters in the last 4 years 2010 through 2014; see Table 1.

Table 1

Overall Group B Lowest Engagement Percentages in 2010 and 2014

Lowest agencies	2010 FEVS %	2014 FEVS %
Dept. of Agriculture	63.3	62.5
Small Business Admin.	63.0	62.5
Dept. of the Interior	64.0	61.3
Dept. of Energy	64.7	60.9
Dept. of Veterans Affairs	63.3	60.6
National Archives & Records Administration	62.9	59.0
Housing Urban Development	59.3	56.5
Broadcasting Board of Governors	55.7	55.6
Dept. of Homeland Security	60.9	53.8

Note. From "Engagement Scores by Department/Large Agencies," by OPM 2014 Federal Employees Viewpoint Results Employees Influencing Change, p. 15.

Table 1 shows Group B agencies' engagement percentages using the 2014 FEVS data. Some agency percentages dropped lower than their 2010 percentages. The data

showed the poor representation of employee engagement and organizational performance.

Fernandez, Cho, and Perry (2010) noted that the hierarchy model of leadership had lost its attractiveness, and leadership scholars had continued to define the distinction between leadership and management but promoted leadership in the public sector as integrated leadership. Integrated leadership consists of five dimensional models to possess effective leadership roles: task-oriented leadership, relations-oriented leadership, change-oriented leadership, diversity-oriented leadership, and integrity-oriented leadership (Fernandez et al., 2010). These roles do not resemble shared leadership where several persons exhibit behavior of all levels to reach a common goal (Fernandez et al., 2010).

Pearce and Conger (2003) noted that shared leadership includes a set of individuals who act as superiors. All five models of integrated leadership play major roles to leadership styles in the public sector. The core of the five-dimensional model is relations-oriented leadership because it interacts with trust performance. Relations-oriented leadership illustrates ways managers, supervisors, and the Senior Executive Service (SES) employee (senior management in government) interacts with subordinates. These interactions include when speaking and communicating about their livelihood, consistent commemoration about their work, providing opportunities for personal growth, and involvement in the decision-making process (Fernandez et al., 2010).

According to Uhl-Bien (2006), E.P. Hollander was a scholar who believed in the relationship-based approach to leadership. Hollander defined leadership as a social-

exchange relationship between the leader and the follower (Uhl-Bien, 2006). Uhl-Bien and Ospina (2012) noted organizational and managerial trust in the public sector have long served as a primary platform to achieve effective and productive management practices. Trust in managerial performance stems from core values in social-psychological relationships occurring at lateral and hierarchical levels in an organization (Park, 2012). In public agencies, organizational success, organizational stability, and the well-being of employees are the major reasons trust increasingly receives recognition as a primary factor in sustaining and developing interpersonal relationships (Park, 2012).

The reform movement of public management, in accordance with the NPM and PMA, allows U.S. federal agencies to practice flexible engagement lessons to remove past stipulations between employees and managers or supervisors. According to PMA, employee engagement is the first indicator, and the concept should be applied from the lowest grade structure to the top of the agency. Using the FEVS data provides feedback to restructure agencies' EEI, but because the results varied, there is no single solution. The Obama administration believes the three sub factors can improve the EEI targets 63% to 67% in 2016, as long as commitment and accountability are present from all levels of personnel to construct a resilient organizational culture.

Table 2 defines each sub factor and provides the 2014 EEI percentage responses for Groups A and B when responding to the five questions. After reviewing the various percentages between Groups A and B, I wanted to determine how one agency ranks differently from the other and the practices that agency leaders create to produce positive or negative organizational outcomes. Public management scholars continue to debate the

numerous theories of leadership, and as public management nuances continue to develop, so will new leadership roles.

Table 2

EEI Percentages for Groups A and B

EEI sub factors description and EVS questions	2014 % for		
	Groups A and B	Group A	Group B
Leaders lead reflects the employees' perceptions of the integrity of leadership, as well as leadership behaviors such as communication and workforce motivation. It is made up of items: Q53. In my organization, senior leaders generate high levels of motivation and commitment in the workforce. Q54. My organization's senior leaders maintain high standards of honesty and integrity. Q56. Managers communicate the goals and priorities of the organization. Q60. Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor? Q61. I have a high level of respect for my organization's senior leaders.	68/46	NASA	USDA
	73/48	FTC	SBA
	66/45	NRC	DOI
	67/47	FERC	DOE
	63/47	OMB	VA
	63/43	NCUA	NARA
	63/43	OPM	HUD
	39		BBG
	39		DHS
Supervisors reflect the interpersonal relationship between worker and supervisor, including trust, respect, and support. It is made up of items: Q47. Supervisors in my work unit support employee development. Q48. My supervisor listens to what I have to say. Q49. My supervisor treats me with respect. Q51. I have trust and confidence in my supervisor. Q52. Overall, how good a job do you feel is being done by your immediate supervisor?	84/73	NASA	USDA
	79/69	FTC	SBA
	82/70	NRC	DOI
	81/71	FERC	DOE
	83/66	OMB	VA
	79/69	NCUA	NARA
	81/66	OPM	HUD
	63		BBG
64		DHS	
Intrinsic Work Experience reflects the employees' feelings of motivation and competency relating to their role in the workplace. It is made up of items: Q3. I feel encouraged to come up with new and better ways of doing things. Q4. My work gives me a feeling of personal accomplishment. Q6. I know what is expected of me on the job. Q11. My talents are used well in the workplace. Q12. I know how my work relates to the agency's goals and priorities.	80/69	NASA	USDA
	76/69	FTC	SBA
	76/69	NRC	DOI
	73/66	FERC	DOE
	73/69	OMB	VA
	74/65	NCUA	NARA
	74/61	OPM	HUD
	68		BBG
	58		DHS

Note. From Federal Employees Viewpoint Results Employees Influencing Change (pp. 52-63), by United States Office of Personnel Management, 2014. Permission to adapt not necessary; table information is in public domain.

It is important to note two acts and a tool were implemented to address improving leadership relations in the public sector. The Government Performance and Results Act of 1993, the Government Performance and Results Act Moderation Act of 2010, and the Program Assessment Rating Tool. Researchers continue to use the Government Accountability Office (GAO) data in reference to these acts and tool to collect federal human capital survey data. The GAO data is not introduced in this study due to the volume of the data and the findings. The acts and tool was a major effort to strengthen the federal government workforce, and remove barriers that were preventing relationships between management and employee.

In accordance with the PMA on engaging agency leaders and managers, the results of the 2014 FEVS and the 2015 FEVS confirmed some of the federal workforce is responding to these three sub factors to uphold a positive trend to employee engagement. Group A presented a strong showing of engagement in the agencies, whereas leaders of the agencies in Group B need to reevaluate their policies and procedures to strengthen their workforce engagement practices.

Adapting to integrated or shared leadership style could lead to a positive rating for employee engagement. This study only touched on a small part of the leadership phenomenon; numerous leadership styles exist that could play major roles when improving employee and organizational engagement. Fernandez et al. (2010) noted that the five leadership roles that constitute integrated leadership closely favor collaborative leadership, which is becoming noticeable in the public sector. What separates the two is a collaborative concept where no one person is in charge but networking and having

multiple actors involved serves the purpose of reaching a common goal (Fernandez et al., 2010). Public management scholars continue to adjust their thought processes regarding which leadership role best supports how to improve the behavior of employees and their organizations.

HCAAF: Dependent Variable

The creation of the HCAAF occurred following the OPM's mandate under the Chief Human Capital Officers Act of 2002. The HCAAF gave leaders of federal agencies the ability to address systems, set standards, and develop metrics to assess the management of federal employees (OPM, 2014). The HCAAF consists of four indices: Leadership & Knowledge Management (LKM), Talent Management, Results-Oriented Performance Culture (ROPC), and Job Satisfaction (JSI). The 2014 FEVS statistics in this category all decreased by 1% except ROPC, which remained the same. The HCAAF section comprised of 39 questions, and LKM is comprised of 12 questions (Questions 10, 35, 36, 51, 52, 53, 55, 56, 57, 61, 64, and 66). The LKM focus was on questions to address how leadership ranks overall. The Talent Management is supported by seven questions (Questions 1, 11, 18, 21, 29, 47, and 68) that measured what talent is among the organization to achieve major accomplishments. In the ROPC, 13 questions (Questions 12, 14, 15, 20, 22, 23, 24, 30, 32, 33, 42, 44, and 65) addressed the pulse of the organizations' practices, processes, products, and outcomes for success. Lastly, Job Satisfaction had seven questions (Questions 4, 5, 13, 63, 67, 69, and 70) that focused on how well employees like their job and why.

The HCAAF helps the workforce to define the areas that are not only personal and psychological aspects of a worker but to strengthen the work environments. Groups A and B showcased their expected percentages, where FTC and NASA in Group A ranked the highest at 73%. In Group B DHS at 48% and BBG at 46% ranked the lowest (OPM, 2014).

To promote the continuation of the HCAAF and stay abreast of the trends in the federal workforce, the OPM and Obama's administration have established various practices, reports, and tools since 2014. In 2015, OMB published a document titled *Analytical Perspectives, Budget of the U.S. Government* ("Chapter 6: Delivering a High-Performance Government"; OPM, 2015). The document outlines the framework for engaging leaders, data-driven performance reviews, cross-agency goals, strategic planning along with several other initiatives (OPM, 2015). The administration discussed establishing FedStat collecting agencies Strategic Reviews with two other data-driven review tools put in place in 2015, PortfolioStat and Benchmarking (OPM, 2015). All these practices create a repository for senior administration and agency leadership to review, compare, and capture data.

Researchers have also written several commentary articles in the *Public Administration Review* regarding how the FEVS and PMA provide a pathway to identify greatness across agency priorities. Lee (2015) mentioned that using the FEVS as a management tool may highlight many possibilities of improving workforce relationships, even though "resource limitations, logistical constraints, and public law" (p. 20) create continuous challenges. Goldenkoff (2015) noted that even though the FEVS does have

some analytical challenges, practitioners should be aware that the basis of the survey results is mainly positive results, as I noted previously regarding the EEI results. Callahan (2015) indicated the data from the FEVS are so powerful because there are 10 years cataloged, which allows a comparison and contrast of trends between public and private organizations.

GSI: Dependent Variable

The FEVS utilize the GSI to preview employees' satisfaction in their workplace. The focus of the GSI is on three main areas of employee satisfaction, which are job, pay, and their organization, as well as a question about whether they would recommend their organization as a great place to work. As a model tool for transparency UnlockTalent.Gov is a dashboard displaying results of the FEVS data for the GSI. One reason the GSI data are transparent is to inform leaders, supervisors, managers, and employees about the trends in agency recruitment and retention. The three satisfaction elements experienced a decline in percentages since 2010, whereas pay satisfaction rebounded by 2% points in 2014 because there was no pay freeze (OPM, 2014).

The GSI percentage in 2014 (59%) did not change from 2013, and the following questions make up the GSI:

69. Considering everything, how satisfied are you with your job?
70. Considering everything, how satisfied are you with your pay?
71. Considering everything, how satisfied are you with your organization?
40. I recommend my organization as a good place to work (OPM, 2014).

In Group A, NASA (74%) and NRC (73%) ranked the highest, and in Group B, DHS (48%) and NARA (49%) ranked the lowest. Even though the percentages did not improve the majority of federal employees still felt satisfied with their job and organization (OPM, 2014).

Most public management scholars would agree that lower turnover rates reflect happier employees, who in turn provide greater productivity. Some public management scholars have discovered misrepresentation in turnover rate studies for federal agencies. Jung (2010) used 2006 data from the Federal Human Capital Survey ($n = 176$ agencies) and 2007 “Separation” (p. 299) data. Jung’s (2010) main purpose was to explore if any statistically significant differences existed between actual and intentional turnover, which brought to the forefront gaps in the literature regarding actual turnover rates (transfer out, quit, and retirement) versus turnover intentions (plan to leave the agency in a year, transfer out federal government, transfer to another agency, and quit). Jung research did not explore death of an employee as a category for actual turnover rates, which may be another gap in literature. Jung (2010) summarized his research using his eight hypotheses in reference to turnover rates and its significances by explaining the importance of merit-based promotion, pay stabilization compared to private industry, aggregated employee satisfaction, and goal vagueness. Turnover rates, whether intentional or actual, are significantly influence by the ambiguity in organizations goals (Jung, 2010). All organizations experience turnover, but it is important to apply diversity management and empowerment practices to keep global satisfaction rates higher than turnover rates.

Diversity scholars feel in order to lessen the turnover rates more empirical studies are necessary to expand the root causes of turnover principles.

Pitts, Marvel, and Fernandez (2011) noted that government employees choose to leave federal service for various reasons. The study included a statistically significant response, with job satisfaction being one of the primary reasons for predicting turnover intention (Pitts et al., 2011). Pitts et al. also mentioned that managers play a key role engaging their employees to address demographic factors and organizational relations. One demographic factor, age using the model “Leaving the Agency” shows a lower probability towards predictability of turnover (Pitts et al., 2011, p. 5). Pitts et al. (2011) used 39 years as a baseline, 40-49 years percentage increased toward predictability of turnover as well as 50-59 years of age but not as significant, lastly 60 years of age and over showed a vastly decrease in the predictability of turnover. Using the model again “Leaving the Government” assigning different variables (going to nonprofit, for-profit organizations) ranked highly with the 50-59 years of age employees (Pitts et al., 2011). Another element of job satisfaction is employee benefits, which has a high correlation to job satisfaction but remains unrelated when measuring the predictability of turnover. Lastly, I would like to bring forward from the study an organizational relations factor: empowerment.

Fernandez et al. (2015) cited several empirical studies using the FEVS data, with employee empowerment and diversity management as their main constructs. Fernandez et al. (2015) defined employee empowerment as (a) a form of extended leadership style, (b) a managerial reaction of sharing authority, resources, and (c) a method to

accomplishments task with very little supervisory oversight. Research by several public management scholars showed employee empowerment explains organizational commitment and job satisfaction but negatively relates to the predictability of turnover. Fernandez and Moldogaziev (2015) cited Bowen and Lawler's four main organizational tactics on how managers should practice employee empowerment; (a) recite information about organization's performance, (b) educate staff on rewards based on organization's performance, (c) knowledge that enables employees to understand and contribute to organizational performance, and (d) use personal power to make decisions that influence organizational direction and performance (p. 157).

Through confirmatory factor analysis, the results showed both convergent and discriminate validity (Fernandez & Moldogaziev, 2015). Studying empowerment, as one of global satisfactions ingredients revealed that individual empowerment can sometimes be counterproductive. One negative aspect of the FEVS was it measured relational empowerment, which relates to the psychological aspect of empowerment. Psychological empowerment helps with the study of employee attitudes and the ways employees nurture their decision processes (Fernandez et al., 2015).

Another strong construct for global satisfaction is diversity management. When organizational leaders practice diverse management programs, organizations experience positive change. Soni (2000) explored the receptivity of diversity using a theoretical model addressing three independent variables: "employee race/ethnicity and gender identity, perceived and real discrimination, and the nature of interpersonal relations on acceptance of diversity" (p. 397). The study concluded the majority of the employees do

not receive diversity management interventions and their agencies seldom practice diversity management to heighten “any real change” in the organization (Soni, 2000, p. 400). However, diversity research in the 21st century is prevalent. Public agencies are challenge with promoting diversity management within the workplace but continue the efforts to promote diversity to strengthen the organization.

In a more recent investigation, Thomas (2006) studied diversity management and described it as a leader’s tool for their decision-making process. Diversity management is growing as a nonsegregating trend of civil rights, both in the United States and globally. Leaders are using diversity management as a decision maker for complex issues to promote “nationalism, mergers and acquisitions, functional integration, headquarters field relationships, customers, products, and brands” (Thomas, 2006, p. 48). Thomas’s (2006) visions about the future for diversity management still include elements of division regarding gender, race, religion, ethnicity, class, politics, and geography and the ways leaders must master the concepts of each to broaden organizations’ well-being.

One of the most inspiring groups identified under the diversity movement is the lesbian, gay, bisexual, and transgender (LGBT) community. Köllen (2016) noted more leaders of European organizations are adding sexual orientation to their diversity management program, as the awareness of sexual orientation in the workplace is increasing. Köllen explored European adaptations to sexual orientation in diversity management by conducting a study at a single agency. Köllen’s (2016) noted due to sexual orientation lesbian and gay men experience unfair practices in the workplace. Köllen (2016) stated the literature is lacking in sexual orientation diversity management

research especially with regard to “grouping diversity management outcomes rather than using individual diversity management outcomes” (p. 1971). However, diversity management practitioners are aware of gaps in the literature. Studies similar to Köllen alert and educate leaders in the workforce to practice addressing sexual orientation diversity management in the workplace.

Diversity management will continue to be a main factor of global satisfaction. Even though more empirical data are necessary to effect more diverse strategies, diversity practitioners understand what tools are necessary to promote and practice diverse activities in the workforce. The PMA is one tool used to promote diversity management by strengthening the federal workforce and addressing people and culture. The focus of the next section is the last dependent variable, the NIQ, which is a new element added to the 2014 FEVS as a major trend.

NIQ: Dependent Variable

The NIQ captures the psychological approach of federal employees’ work habits. The NIQ consists of 20 questions grouped in five different habits of inclusion: fair (Q. 23, 24, 25, 37, and 38), open (Q. 32, 34, 45, and 55), cooperative (Q. 58 and 59), supportive (Q. 42, 46, 48, 49, and 50), and empowering (Q. 2, 3, 11, and 30) (OPM, 2014). Even though inclusion elements have been a part of the FEVS since 2011, the notion of inclusion was always within engagement and global satisfaction. As a separate index, the survey can highlight its score separately from engagement and global satisfaction (Clark, 2015).

As the average-score agencies were at 56% in 2013 and 2014, the highest performing agencies were NASA (73%); NRC (69%); FTC (68%); and FERC, National Credit Union Association, and OMB (66%). The lowest scores continue to fall within the same agencies as in the other indexes: DHS (46%), BBG (47%), Housing and Urban Development (49%), the National Labor Relations Board (53%), and Veterans Affairs and NARA (52%). Because of the inclusion of work habits in FEVS, agency leaders could use tools to reduce cultural barriers by studying the five habits (Clark, 2015). An agency that scores high in engagement and global satisfaction also scores well in the NIQ because they interrelate.

Clark (2015) noted diverse groups perform successfully because there is less bias and more collaboration, which leads to more information, innovation, and financial accomplishments. Boekhorst (2015) also indicated that group functioning shows a significant improvement when employees in a diverse culture feel comfortable sharing their ideas to foster workplace inclusion. Advance planning in organizations provides a climate for institutional inclusion led by authentic leaders. Diversity and inclusion practitioners indicate that the recipe for organizational achievement must include cultural awareness. Agencies need to widen the scope of cultural awareness practices in their diversity management strategies. Leaders monitoring their agencies the NIQ can promote better diversity management plans.

Controlling Variables

This study included three controlling variables: gender, age, and education. Using the three variables produces multivariate relationships between Groups A and B. Testing

the variables illustrates their impact of the data from the four indices supporting Groups A and B. Providing the three variables may provide a more concise explanation of the relationships between Groups A and B.

Summary and Conclusion

As a public management practitioner, I have asked how many initiatives it would take for an organization to rise from a less engaging performing agency to a higher performing agency. With the question in mind, I began to study the literature for possible remedies to address inquiries about higher versus lower performing agencies. The literature used in this chapter was positive in some aspects. The research presented by scholars shared valid points but some scholars can contest it as public administration practices in the 21st century. The OPM is a federal agency, and its leaders have taken the leadership role in conducting research that reflects the mind-sets of federal workers and in describing trends in the organizational achievements of employee engagement, human capital assessment, global satisfaction, new inclusion quotient, employee empowerment, and diversity management (OPM, 2014, 2015, 2016).

Many researchers have reported on the various leadership styles and roles that support the engagement of people and culture in the federal workforce. In the FEVS engagement indices, leader lead, supervisor, and intrinsic work experience is summarized mainly about the leadership style supported by integrated, shared, and collaborative leadership. Although integrated leadership consists of a five-dimensional model (task-oriented leadership, relations-oriented leadership, change-oriented leadership, diversity-oriented leadership, and integrity-oriented leadership), relations-oriented leadership is

clearly about how employees establish trust (consistent communication, survival techniques, etc.) with supervisors and managers, which later enriches engagement. Relational leadership is still emerging in leadership literature (Uhl-Bien, 2006), and the relational dynamics are still under investigation regarding how relational leadership sparks interactions between leaders and followers. Uhl-Bien (2006) noted cross-sectional surveying allows researchers to evaluate the leadership concept as a process to understand the “social dynamics by which leadership relationships form and evolve in the workplace” (p. 20).

U.S. federal agencies have undergone substantial organizational changes due to decentralization, privatization, and atomization to increase flexibility and discretion, as reformers believed that the NPM reform drivers would transform public organizations into more accountable, reliable, and effective organizations (Park, 2012). The HCAAF, EEI, NQI, and GSI all depict surreal phenomena of strengthening the federal workforce. Agency leaders use public choice theory to change their legacy practices to align with technology and explore smarter ways to conduct business. Engaging and satisfying employees, diversifying management, applying inclusive techniques, and empowering employees are all critical steps to improving the way government works and delivers to citizens, but are still not the norm in federal government. Even though there are several gaps in the literature, and a need exists for more empirical research, public management researchers feel that practicing the PMA initiatives can help strengthen performance in federal organizations.

Overall, the goal is to instill policies to support futuristic practices by hearing the voices of employees and leaders to better the government and in turn improve organizational behavior. Building a culture, which can foster organizational performance across agencies, is the number one priority of PMA. It is evident the PMA has prescribed a pathway to follow and some agencies are on board where others still do not have a clue. Chapter 3 explains the research design, methodology, research questions, hypothesis, and the secondary data used.

Chapter 3: Research Method

Introduction

This quantitative study involved using the FEVS responses and the PMA to improve people and culture in the federal sector to examine the relationship between higher performing agencies and lower performing agencies. To test the differences between the groups, I used three control variables that aligned with each FEVS index: gender, age, and education. This chapter includes a discussion of the research design; rationale for the research design; methodology that includes a discussion of the population and sample size; and procedures for data collection and data analysis. The chapter also includes a discussion on the threats to validity and on ethical procedures. This chapter ends with a summary of the research methodology chosen for this study.

Research Design and Rationale

Fernandez et al. (2015) conducted a quantitative study on the FEVS tool and on how public management researchers have used the FEVS data to express relationships to other research constructs. Fernandez et al. examined 40 research articles based on the FEVS data and reported on the tool to strengthen the connection between the OPM creators of the FEVS and the researchers who use the FEVS for scholarly contributions. Fernandez et al.'s quantitative research of 40 research articles involved assessing the contributions that public management researchers have made using the FEVS data, as well as some limitations. Additionally, Fernandez et al. (2015) focused on several organizational phenomena: leadership styles and approaches, performance management, diversity management, employee engagement and empowerment, job satisfaction, and

turnover intention. The phenomena supported the four pillars of President Obama's (2014) management agenda: efficiency, effectiveness, economic growth, and people and culture.

This quantitative study involved a nonexperimental, correlational, and descriptive research design. Quantitative research is a type of study in which the objective is to explain a phenomenon by collecting numerical data and analyzing the data using statistics (Pulido-Martos et al., 2012). A quantitative study is suitable when the objective of the study is to investigate relationships between two or more variables measured numerically (Babbie, 2012). Secondary data included data from the 2014 FEVS to understand the relationship between higher performing agencies and lower performing agencies, especially when exploring the four assigned indices in the FEVS. Researchers at the OPM (2014, 2015, 2016) gathered data from surveying federal agencies. The data summarized federal employee attitudes regarding their place of work. The OPM shares data with leaders and employees to address issues preventing the strengthening of employee engagement and organizational performance (OMB, 2014).

If researchers do not randomly assign participants to a specific group, there is no opportunity to test different conditions within the experiment (Keppel & Zedeck, 1989). This quantitative study included a nonexperimental research design because there were no interventions or treatment groups in the study. Researchers conduct correlational research to determine relationships between variables without inferring causality (Holton & Burnett, 2005). A correlational research design was appropriate, as the research did not involve any manipulation of variables or a controlled experimental research setting.

Researchers use multiple regression analysis to predict correlations between variables using t statistics to determine the significance of the correlations (Pallant, 2010).

Methodology

I selected the questions and responses from the OPM (2016) to establish if a correlation exists between higher and lower performing agencies and the four FEVS indices using gender, age, and education as controlling variables. Researchers conducting studies with a quantitative design can include “numeric descriptive” (McNabb, 2015, p. 20) data to provide significant or nonsignificant testing results. The survey consisted of 98 survey questions (14 demographic questions and 84 questions used to measure federal employees’ perceptions), 37 large agencies, and 45 independent agencies with 839,788 federal employees. The total number of participants was 392,752, which represented 46.8% of the total population. To address the highest and lowest scoring large agencies and their engagement scores, I created two groups: Group A consisted of the seven highest scoring agencies and Group B consisted of the nine lowest scoring agencies. These groupings created a population of $n = 141,540$. The survey was a web survey that included a 6-week window in which to provide responses.

I determined the sample size for this quantitative study by conducting a power analysis using G*Power software. The sample size computation included Cohen’s effect size, the level of significance, and the statistical power or the probability of rejecting a false null hypothesis. The a priori power analysis included the following factors: (a) a statistical test of multiple linear regression analysis with four predictors (one independent variable, grouping, and three control variables: gender, age, and education); (b) statistical

power of .80 (or $\beta = .20$), as normally used in quantitative studies (Faul, Erdfelder, Buchner, & Lang, 2009); (c) a small to medium effect size coefficient of .08 based on a regression analysis; and (d) a level of significance value of .05, as typically used in a quantitative study. The analysis yielded a minimum survey produced 392,000 samples (see Figure 4). The results of the power analysis computed for 101 samples indicated that there should be at least 101 sample size data of the dependent variables, independent variable, and control variables from the samples of agencies collected to achieve 80% statistical power for the quantitative study.

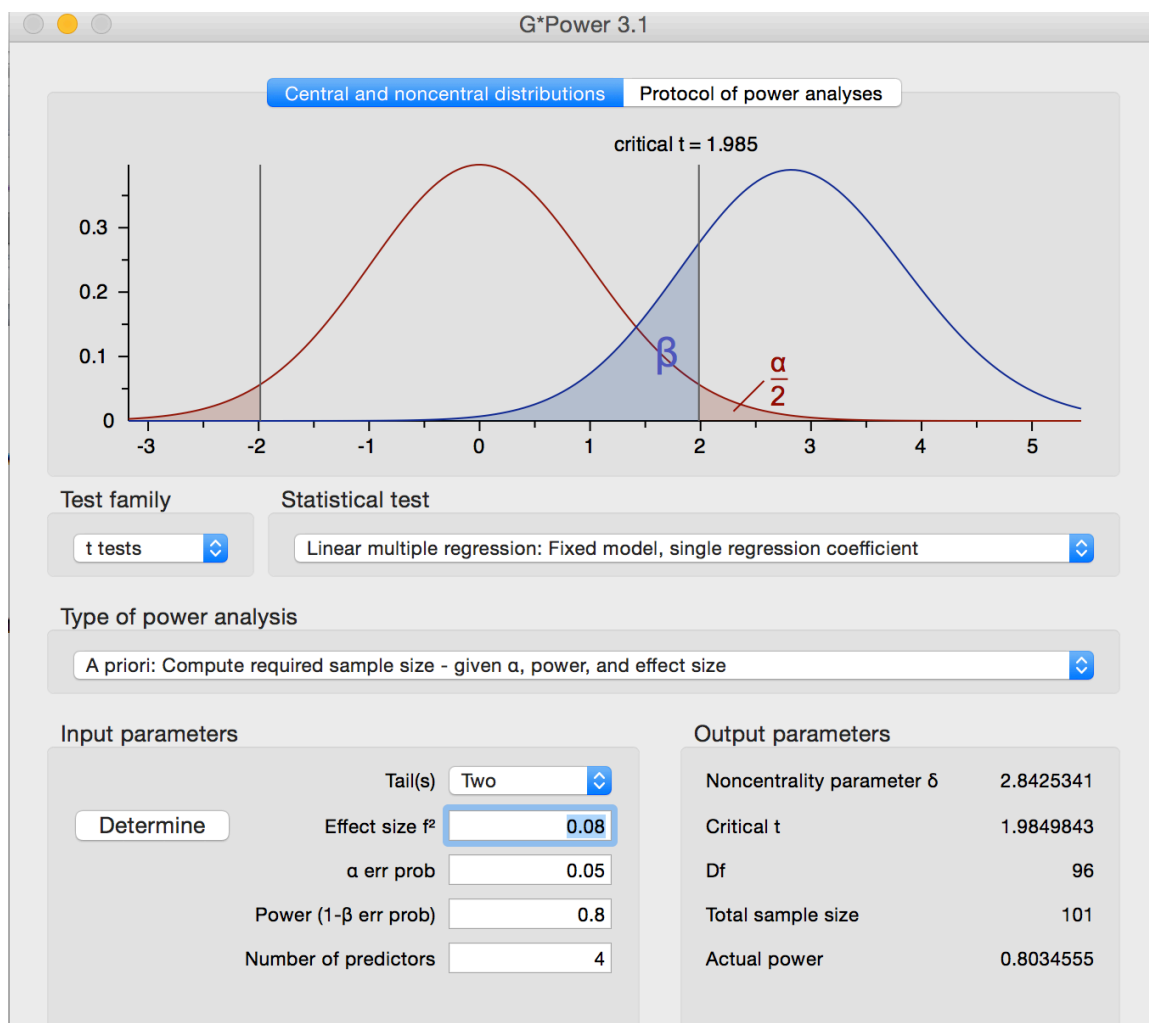


Figure 4. Result of G*Power sample size computation.

This study involved obtaining data from a secondary source, the OPM website. The database included data on different study variables. Secondary data are existing data available in historical records, databases, and documents (Andrews, Higgins, Andrews, & Lalor, 2012). The data collected were from 2010 to 2014. The data of the dependent variables of four indices (EEI, HCAAF, GSI, and NIQ) were continuously measured. The data of the independent variable of groupings or agency type were a categorically measured variable with two groups: Group A and Group B. The measurements of the

control variables of gender and education were categorical while the measurement of age was continuous. The data of the study variables were from the 5-year period from 2010 to 2014.

To determine differences among the dependent variables as portrayed within Groups A and B (high- and low-performing agencies, respectively) and controlling variables (gender, age, and education), the IBM SPSS Version 24 was used to process the multiple regression analysis. I used descriptive statistics to summarize the demographic and study variable data. I also analyzed frequency and percentage tables for categorically or nominally measured variables and calculate means and standard deviations for continuously measured variable.

I used Cronbach's alpha values to test the reliability of the data of the four indices: EEI, HCAAF, GSI, and NIQ. Cronbach's alpha statistics test the internal consistency reliability of data. Cronbach's alpha statistic should be at least .70 to show acceptable internal consistency reliability. I obtained Cronbach's alpha statistics for each of the four indices.

The study involved analyzing the quantitative data using multiple regression analysis. Prior to regression analysis, I conducted normality testing on the data of the different dependent variables. It is a requirement of a parametric statistical test that the data should exhibit a normal distribution. A regression analysis is a parametric statistical test. An investigation of the normality distribution involved examining the skewness display of the kurtosis statistics, as well as the normality plots in the histograms. I also generated scatter plots of the data of the study variable and used the scatter plots to

investigate the presence of outliers in the data set. Researchers should remove outliers in the data set prior to conducting statistical analysis, as they have a negative effect on the results of the statistical analysis (Faul et al., 2009).

Four research questions represent each index from the FEVS: EEI, HCAAF, GSI, and NIQ. To explore the relationships between Groups A and B, the questions were as follows:

Research Question 1: Are there differences in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

Research Question 2: Are there differences in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

Research Question 3: Are there differences in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

Research Question 4: Are there differences in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

A multiple regression analysis helped to address the four research questions and to determine whether the four indices EEI, HCAAF, GSI, and NIQ between federal agencies in Groups A and B were significantly different while controlling for gender, age, and education. The multiple regression analysis determined whether the independent

variables (grouping or agency type) significantly predicted the dependent variables (EEI, HCAAF, GS, and NIQ) after controlling for the control variables of gender, age, and education. A multiple regression analysis statistical test is suitable for measuring the size of the effect and whether independent variables have positive or negative relationships with a dependent variable (Neuman, 2009). I generated different regression models for each dependent variable. The study included four-regression analysis to predict the independent, dependent, and control variables outcomes.

The first block of the multiple regression models included the control variables of gender, age, and education. In SPSS, I added the control variables in the first block to determine their effects on the dependent variables. I isolated the individual effects of each control variable and tested the significance of their effect. I added the independent variable of grouping or agency type to the multiple regression models in the second block to test if it added significantly to the model, which would indicate if the independent variable accounted for any statistical significance of additional variance to each of the dependent variables while controlling for the effects of the control variables. The result of the analysis determined the individual effects of the independent variable of interest to the dependent variables in the presence of the control variables by examining the statistical significance of the change in the correlation coefficient R^2 .

An alpha level or level of significance value of .05 was suitable to determine the significance of the effects of the independent variable in predicting the dependent variables in the regression analysis. The independent variables had a significant predictive relationship with the dependent variable if the p value of the t statistics of the

regression was less than or equal to the level of significance. This outcome would mean that there were significant differences in the indices between federal agencies in Groups A and B while controlling for gender, age, and education.

I examined the beta coefficient in the regression model to determine the degree of the predictive relationship of the independent variable to the dependent variable. A positive value of the beta coefficient indicates high scores on the independent variable are related to high scores on the dependent variable. A negative value of the beta coefficient indicates that the independent variable has an inverse relationship with the dependent variable, which means that high scores on the independent variable are associated with low scores on the dependent variable. The beta coefficient serves to measure the strength of a relationship and to indicate whether any independent variables are able to predict the scores on a dependent variable (Tabachnick & Fidell, 2007).

Threats to Validity

According to Fernandez et al. (2015), management researchers vouched for the reliability and validity of the FEVS measurements. One of the strengths of the survey is its repeatability, as its administrators at the OPM have used the same objectives since 2002. The administrators continued to perfect the thematic areas that add value and correct those areas that were confused or no longer address employees' perspective. When the OPM repeated research in the same fashion over a period of time, they improved the testing tool and restructured the survey questions to address current and future research issues.

Analysts at the OMB (2016) noted the administration of statistical processes was correct in reference to standards and guidelines for statistical surveys. According to the OPM (2014), data weighting “took into account the variable probabilities of selection across the sample domains, nonresponses, and known demographic characteristics of the survey population. Therefore, the margin of error for responses was plus or minus 1 percentage point” (para. 1).

Several practitioners have used the FEVS as a tool in their studies since 2004; therefore, content validity has occurred. Fernandez et al. (2015) noted that 31 of the 42 research articles on the FEVS used Cronbach’s alpha test. Drost (2011) commented on the alpha coefficient and its usefulness when predicting reliability by using an item-specific variance during testing. In this study, I ran preliminary reliability analysis using Cronbach’s alpha to ensure the four items that comprised the FEVS index and support remained internally consistent and generally measured the same constructs.

Ethical Procedures

I received approval from Walden University’s Institutional Review Board (IRB) before conducting the study, and I followed IRB policies and procedures to maintain the integrity of the research. This research derived solely from data collected through the OPM (2014, 2015). I followed all procedures to ensure this research met the ethical requirements of the Walden University IRB. I used secondary data; therefore, no recruitment or participation occurred with live subjects. I am a civilian employee of the U.S. Department of Health and Human Services. At no time was there any interaction

with the OPM agents, Department of Health and Human Services conducting any participation, data collection, or assistance in reference to this study.

Summary

The study included a quantitative, nonexperimental, correlational, descriptive research design to conduct multiple regression analysis on existing secondary data. The numeric descriptive data derive resulted from the application of rigorous standards, which supported a quantitative design. This study involved analyzing data from the OPM (2014) database. I extracted the survey questions that supported this study and the corresponding response data from the OPM database. Multiple regression analysis was suitable to measure differences among the responses from the database and to explain relationships among the independent variables (gender, age, and education). Education statistics became an element to gauge for the first time by the FEVS model (OPM, 2014). The OPM database used in this study included responses from 65% of the total OPM population from the 16 OPM agencies. Chapter 4 contains the study results, which included details of the data analysis and findings. Chapter 5 includes the results and their implications for practice, research, and theory.

Chapter 4: Results

Introduction

The purpose of this study was to explore, analyze, and determine whether a correlation existed between the employees of higher and lower performing federal agencies as measured by the four indices of the FEVS, namely, the EEI, HCAAF, GSI, and NIQ. In addition, the purpose was to determine whether the variables of gender, age, and education affect the relationship between the employees of the two groups of federal agencies. The research questions and their related hypothesis statements are the following:

RQ1: What are the differences in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education?

H₀1: There is no difference in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_a1: In Groups A and B, there are differences in the EEI while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4)?

RQ2: What are the differences in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education?

H₀2: There is no difference in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a2} : In Groups A and B, there are differences in the HCAAF while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

$RQ3$: What are the differences in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education?

H_03 : There is no difference in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a3} : In Groups A and B, there are differences in the GSI between federal agencies while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

$RQ4$: What are the differences in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education?

H_04 : There is no difference in the NIQ index between federal agencies, Group A, and Group B while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

H_{a4} : In Groups A and B, there are differences in the NIQ index while controlling for gender, age, and education (gender = X_2 , age = X_3 , and education = X_4).

In this chapter, I describe the data collection process, inclusive of the descriptive and demographic characteristics of the sample. The results section includes a discussion of the inferential and descriptive statistics inclusive of the basic univariate analysis.

Data Collection

The OPM was the agency that provided the secondary data for this study. The OPM secondary data exist as historical records, databases, and documents (Andrews et al., 2012). The main tool used to measure employees' perceptions about their work environment and behavior was the FEVS. The FEVS is a tool that measures employees' perceptions of whether, and to what extent, conditions that characterize successful organizations are present in their agencies. The survey represented a substantial rate of participation; however, it was observed in the report that not every federal employee who took the survey responded to important demographic characteristics. These were deleted to reduce bias in survey when the respondent population and the survey population no longer matched on important characteristics. The 2014 survey produced 392,000 responses attesting to participants' work environment and behavior (OPM, 2014). Although the survey produced 392,000 responses, only 300 responses were randomly selected. This final number ($n = 258$) far exceeded the minimal sample size of 101 to achieve 80% statistical power for the quantitative study.

The data for this study specifically focused on calendar year 2014. The data of the dependent variables of four indices (EEI, HCAAF, GSI, and NIQ) were continuously measured. The data of the independent variable of groupings or agency type were categorically measured with two groups: Group A (high performing agency) and Group B (low performing agency). The measurements of the control variables of gender and education were categorical while the measurement of age was continuous.

The FEVS was comprised of 84 items or questions using five response categories ranging from 1 to 5: 5 = *strongly agree*, 4 = *agree*, 3 = *neither agree nor disagree*, 2 = *disagree*, 1 = *strongly disagree*, and *no basis to judge/do not know* (OPM, 2016). The findings did not include the last response category, *no basis to judge/do not know*.

Results

A multiple regression analysis was conducted to evaluate the difference in relationships of the EEI, HCAAF, GSI, and NIQ between Groups A and B when controlling for gender, age, and education. The independent variable, gender, included two levels, male and female. Age included four levels: less than 40, 40 to 49, 50 to 59, and 60 and over. Education included three levels: education prior to a bachelor's degree, bachelor's degree, and post bachelor's degree.

The independent variable, agency type, included two levels: high performing and low performing, or Group A and Group B. The dependent variables were the means of the EEI, HCAAF, GSI, and NIQ.

Most parametric tests require that the assumption of normality be met. To test the assumption of normal distribution, the tests of skewness and kurtosis were applied. The test results for assumption of normality ($M = 3.37$, $SD = .664$) examining standardized skewness indicated the data were statistically normal. The skewness (-.539) was within the range ± 2 and the kurtosis (.454) values were within the range of ± 7 . The Levene's test was used to test the assumption of homogeneity of variance and to assess if the groups had equal variances (See Table 3).

Table 3

FEVS Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
.210	1	256	.647

Note that the Levene's test was not significant; $p = .647$ at the .05 alpha level, thus, the assumption of homogeneity of variance was met and not violated. See Table 4 for the means and standard deviations for each of the two groups.

Table 4

Descriptive Statistics

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Group A- High performing	131	3.4258	.68021	.05943	3.3082	3.5433
Group B- Low performing	127	3.3083	.64166	.05694	3.1956	3.4210
Total	258	3.3679	.66284	.04127	3.2867	3.4492

The results given in Table 4 indicated that respondents of Group A's ($M = 3.425$, $SD = .680$) perceptions were very similar to Group B's ($M = 3.308$, $SD = .641$). The overall demographics of respondents were computed in terms of frequency and percentage statistics. See Table 5:

Table 5

Age, Gender, and Educational Level

	Variables	Frequency	Percent
Age	Less than 40	63	21.5
	40-49	13	4.4
	50-59	107	36.5
	60 and Over	109	37.2
Gender	Male	141	57.6
	Female	104	42.4
	Total	245	100.0
Education	Education Prior	17	7.1
	to a Bachelors	223	92.9
	Degree	240	
	Bachelors		
	Degree		
	Total		100.0

In addition, the FEVS met the test of Cronbach's alpha for reliability ($n = 84$, $\alpha = .997$), which strongly indicated that the FEVS instrument was validated and highly reliable. The average mean score for each dependent variable of the EEI, HCAAF, GSI, and NIQ was computed for a composite score. The range of the mean scores was between 1 and 5. The mean and standard deviations are displayed in Table 6:

Table 6

Mean and Standard Deviations

	<i>N</i>	Minimum	Maximum	Mean	Std. Deviation
EEI	259	1.00	5.00	3.6166	.82931
GSI	253	1.00	5.00	3.4812	.92669
NIQ	259	1.00	5.00	3.4135	.82961
HCAAF	259	1.02	5.00	3.4696	.77251

Shown in Table 6 are the mean and standard deviation for each dependent variable of EEI ($M = 3.6166$, $SD = .82931$), GSI ($M = 3.48$, $SD = .926$), NIQ ($M = 3.41$, $SD = .829$), and the HCAAF ($M = 3.469$, $SD = .772$).

Hypothesis 1

H₀1: There is no difference in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education.

To evaluate fully the results of *H1*, I computed partial correlations using multiple regression procedures in SPSS to determine whether the dependent variable of the EEI was the same or different for the federal agencies in Group A (high performing) and Group B (low performing) while controlling for gender, age, and education. The predictors were the education level, age, and gender. The dependent variable was the EEI and the independent variable was the agency type.

The results of the analysis indicated that age, gender, and education did not account for a significant amount of the EEI for Group A, $R^2 = .039$, ($F(3, 133) = 1.540$, $p = .208$). See Table 7.

Table 7

EEI Group A _ANOVA Model

ANOVA ^{a,b}						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.225	3	1.075	1.540	.208 ^c
	Residual	78.899	113	.698		
	Total	82.124	116			

a. Dependent Variable: EEI

b. Selecting only cases for which Group A = Group A

c. Predictors: (Constant), Gender, Age, Education Level

With regard to Group B, the results of the multiple regression analysis indicated that age, gender, and education did not account for a significant amount of the EEI for Group B, $R^2 = .010$, ($F_3, 105 = .405$, $p = .750$). See Table 8.

Table 8

EEI Group B _ANOVA Model

ANOVA ^{a,b}						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.859	3	.286	.405	.750 ^c
	Residual	74.225	105	.707		
	Total	75.084	108			

a. Dependent Variable: EEI

b. Selecting only cases for which Group B = Group B

c. Predictors: (Constant), Gender, Education Level, Age

In summary, the results indicated that there was no significant difference in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected.

Hypothesis 2

H₀₂: There is no difference in the HCAAF between federal agencies in Groups A and B while controlling for gender, age, and education.

To evaluate the results of *H₂*, I computed partial correlations using multiple regression procedures as previously conducted. The predictors were the education level, age, and gender. The dependent variable was the HCAAF and the independent variable was the agency type. The results of the analysis indicated that age, gender, and education did not account for a significant amount of the HCAAF for Group A, $R^2 = .041$, ($F(3, 113) = 1.593$, $p = .195$). For Group B, the results also indicated that age, gender, and education did not account for a significant amount of the HCAAF, $R^2 = .070$, ($F(3, 105) = .206$, $p = .892$).

In summary, the results of the multiple regression analysis indicated there is no difference in the HCAAF between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected.

Hypothesis 3

H₀₃: There is no difference in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education.

For Group A, the results of the partial correlations using multiple regression analysis indicated that age, gender, and education did not account for a significant amount of the GSI for Group A, $R^2 = .042$, ($F(3, 113) = 1.667$, $p = .178$). For Group B, the results also indicated that age, gender, and education did not account for a significant amount of the GSI, $R^2 = .010$, ($F(3, 105) = .413$, $p = .744$).

In summary, the results of the multiple regression analysis indicated there is no difference in the GSI between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected.

Hypothesis 4

H₀₄: There is no difference in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education.

For Group A, the results of the partial correlations using multiple regression indicated that age, gender, and education did not account for a significant amount of the NIQ for Group A, $R^2 = .023$, (F3, 113 = .90, $p = .444$). For Group B, the results also indicated that age, gender, and education did not account for a significant amount of the NIQ, $R^2 = .018$, (F3, 105 = .362, $p = .596$).

In summary, the results of the analysis indicated there is no difference in the NIQ between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected.

Additional Test

In addition to multiple regression, I conducted an independent samples test to compare the means between the two groups on the same continuous, dependent variables of the EEI, HCAAF, GSI, and NIQ and the controlling variable (now independent variables). See Table 9.

Table 9

Independent Samples Test

		Levene's Test for Equality of Variances				t-test for Equality of Means			95% Confidence Interval of the Difference	
		<i>F</i>	<i>Sig.</i>	<i>df</i>	<i>Sig. (2- tailed)</i>	Mean Difference	Std. Error Difference	Lower	Upper	
EEI	Equal variances assumed	.005	.944	1.591	256	.113	.16346	.10271	-.03881	.36572
	Equal variances not assumed			1.592	255.908	.113	.16346	.10269	-.03877	.36568
GSI	Equal variances assumed	.404	.525	1.887	250	.060	.21843	.11578	-.00960	.44647
	Equal variances not assumed			1.889	249.244	.060	.21843	.11562	-.00929	.44616
NIQ	Equal variances assumed	.186	.667	1.527	256	.128	.15704	.10285	-.04549	.35957
	Equal variances not assumed			1.528	255.935	.128	.15704	.10277	-.04534	.35943
HCAAF	Equal variances assumed	.384	.536	1.582	256	.115	.15125	.09562	-.03704	.33955
	Equal variances not assumed			1.584	255.345	.114	.15125	.09549	-.03680	.33931
Gender	Equal variances assumed	8.188	.005	-1.759	242	.080	-.11099	.06312	-.23532	.01333
	Equal variances not assumed			-1.757	240.273	.080	-.11099	.06317	-.23543	.01345
Education Level	Equal variances assumed	2.986	.085	.860	238	.391	.029	.033	-.037	.094
	Equal variances not assumed			.856	225.515	.393	.029	.033	-.037	.094
Age	Equal variances assumed	.891	.346	.515	256	.607	.096	.187	-.272	.464
	Equal variances not assumed			.515	255.817	.607	.096	.187	-.272	.464

Table 9 provides the actual results from the independent *t* test. The *Sig. (2-tailed)* column (shaded) indicated that the group means are not statistically significantly different because the values in the "*Sig. (2-tailed)*" column are greater than 0.05. These findings are consistent with the multiple regression results previously reported. Hence, all four null hypothesis statements failed to be rejected.

In addition to the multiple regression and independent sample *t* test, Pearson's correlation was carried out to look for relationships between the two agencies and the four indices of dependent variables of the EEI, HCAAF, GSI, and NIQ (see Table 10).

Table 10

Correlations

		Correlations				
		Agency	EEI	GSI	NIQ	HCAAF
Agency	Pearson Correlation	1	-.099	-.118	-.095	-.098
	Sig. (2-tailed)		.113	.060	.128	.115
	Sum of Squares and Cross-products	64.484	-10.540	-13.758	-10.127	-9.754
	Covariance	.251	-.041	-.055	-.039	-.038
	N	258	258	252	258	258
EEI	Pearson Correlation	-.099	1	.804**	.931**	.934**
	Sig. (2-tailed)	.113		.000	.000	.000
	Sum of Squares and Cross-products	-10.540	177.442	155.621	165.199	154.402
	Covariance	-.041	.688	.618	.640	.598
	N	258	259	253	259	259
GSI	Pearson Correlation	-.118	.804**	1	.792**	.932**
	Sig. (2-tailed)	.060	.000		.000	.000
	Sum of Squares and Cross-products	-13.758	155.621	216.404	154.023	168.339
	Covariance	-.055	.618	.859	.611	.668
	N	252	253	253	253	253
NIQ	Pearson Correlation	-.095	.931**	.792**	1	.922**
	Sig. (2-tailed)	.128	.000	.000		.000
	Sum of Squares and Cross-products	-10.127	165.199	154.023	177.568	152.506
	Covariance	-.039	.640	.611	.688	.591
	N	258	259	253	259	259
HCAAF	Pearson Correlation	-.098	.934**	.932**	.922**	1
	Sig. (2-tailed)	.115	.000	.000	.000	
	Sum of Squares and Cross-products	-9.754	154.402	168.339	152.506	153.967
	Covariance	-.038	.598	.668	.591	.597
	N	258	259	253	259	259

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

As shown in Table 10, there is a negative correlation between the two agencies and the four indices of the EEI ($r = -.099$, $p = .113$), GSI ($r = -.118$), $p = .060$), NIQ ($r = -.095$), $p = .128$), and the HCAAF ($r = -.098$), $p = .115$). However, consistent with previous findings, the p -values of the indices were not statistically significant ($p \geq .05$) and were probably due to chance. A decrease in the four indices was correlated with increasing change in the agency types. The P-P scatterplot (Figure 5) presents a linear pattern among variables indicating no significant departure from normality.

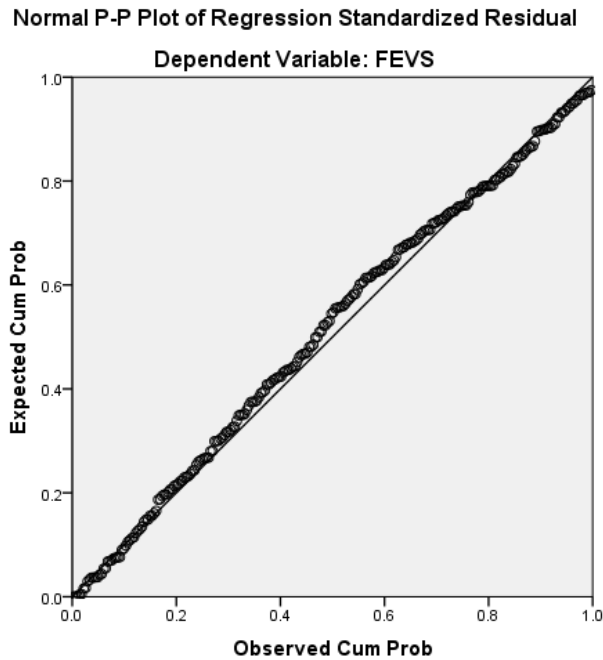


Figure 5. P-P scatterplot.

Summary

In Chapter 4, the results of the study were reported to determine whether a correlation or differences existed between the employees of higher and lower performing federal agencies as measured by the four indices of the FEVS, namely, the EEI, HCAAF, GSI, and the NIQ, controlling for the variables of gender, age, and education. The research questions examined the difference in relationships of the four indices between Groups A and B when controlling for gender, age, and education. After several multiple regression and correlation tests were computed, the output data indicated that no statistically differences existed between the employees of higher and lower performing federal agencies as measured by the four indices of the FEVS.

Chapter 5 presents a detailed discussion and interpretation of the findings. In addition, the limitations, conclusions, and recommendations are discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to investigate, analyze, and determine whether a correlation existed between the employees of higher and lower performing federal agencies as measured by the four indices of the FEVS, namely, the EEI, HCAAF, GSI, and the NIQ, when controlling for gender, age, and education. The aim was to determine whether the variables of gender, age, and education affect the relationship between the employees of the two groups of federal agencies.

This study involved obtaining data from a secondary source: the OPM website. The data collected were from 2010 to 2014. The data of the dependent variables of four indices (EEI, HCAAF, GSI, and NIQ) were continuously measured. The survey consisted of 98 survey questions (14 demographic questions and 84 questions used to measure federal employees' perceptions). Group A consisted of employees from the seven highest scoring agencies and Group B consisted of employees from the nine lowest scoring agencies. The groups were then labeled as higher and lower performing federal agencies respectively. These combined groupings created a good sample selection of 258 employees.

The key findings of the study addressed the four hypothesis statements. The results of the multiple regression analysis indicated there were no statistically significant differences in the EEI, HCAAF, GSI, and the NIQ between Groups A and B federal agencies while controlling for gender, age, and education. Therefore, the four-null hypothesis failed to be rejected.

Interpretation of the Findings

The FEVS was developed to measure organizational climate, including job and organizational satisfaction, within government agencies (OPM, 2014). Historically, efforts were made to measure employee engagement, which emphasizes the passion, commitment, and involvement of employees. An engaged employee is viewed as one who immersed in the content of the job and energized to spend extra effort in job performance.

The present FEVS did not contain direct measurements of employee feelings of engagement such as passion, commitment, and involvement (OPM, 2014). However, it did include questions that covered most, if not all, of the conditions likely to lead to employee engagement. Using these questions, the OPM developed an index that tapped the conditions that lead to engaged employees. These components of the EEI index were Leaders Lead, Supervisors, and Intrinsic Work Experiences, with appropriate comparisons.

Research Question 1: What are the differences in the EEI between federal agencies in Groups A and B while controlling for gender, age, and education?

The data analysis indicated that each component of the EEI was negatively correlated; however, there were no statistically significant differences found in the EEI between Groups A and B federal agencies before and after controlling for gender, age, and education. Therefore, the null hypotheses failed to be rejected. Additional correlation test indicated that the EEI subscales were negatively correlated ($r = -1$) but not significantly ($p > .05$). These findings were inconsistent with the 2014 FEVS and the

2015 FEVS research, which suggested that Group A presented a strong showing of engagement in the agencies, whereas leaders of the agencies in Group B needed to reevaluate their policies and procedures to strengthen their workforce engagement practices.

Research Question 2: What are the differences in the HCAAF index between federal agencies in Groups A and B while controlling for gender, age, and education?

The HCAAF gives leaders of federal agencies the ability to address systems, set standards, and develop metrics to assess the management of federal employees (OPM, 2014). The HCAAF consists of four indices: LKM, TM, ROPC, and JSI. The results of the analysis indicated there were no statistically significant differences in the HCAAF between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected.

Additional tests revealed that the individual indices were negatively correlated with the agencies, but no significant differences were found between Groups A and B. Again, these findings were inconsistent with the 2014 FEVS and the 2015 FEVS survey research, which found that some organizations in Groups A ranked the highest at 73% compared to Group B at 48% (OPM, 2014).

Research Question 3: What are the differences in the GSI between federal agencies in Groups A and B while controlling for gender, age, and education?

The results of the study indicated there was no difference in the GSI between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected. The FEVS uses the GSI to preview

employees' satisfaction in their workplace. The focus of the GSI is on three main areas of employee satisfaction, which are job, pay, and their organization, as well as a question about whether they would recommend their organization as a great place to work. The three satisfaction elements experienced a decline in percentages since 2010, whereas pay satisfaction rebounded by 2% points in 2014 because there was no pay freeze (OPM, 2014). The GSI percentage in 2014 (59%) did not change from 2013. These findings may help explain the insignificant differences between the two groups.

Research Question 4: What are the differences in the NIQ index between federal agencies in Groups A and B while controlling for gender, age, and education?

The NIQ captures the psychological approach of federal employees' work habits. The results of the analysis indicated there is no difference in the NIQ between federal agencies of Groups A and B while controlling for gender, age, and education. Therefore, the null hypothesis failed to be rejected. Previous research indicated that the average-score agencies were at 56% in 2013 and 2014. The lowest scores continued to fall within the low performing agencies as in the other indices. However, this study did not reveal a significant difference in the NIQ between federal agencies of Groups A and B.

This study included a theoretical assumption that a highly diverse federal workforce promotes positive organizational outcomes (Fernandez et al., 2015). However, the diversity in terms of age, gender, and educational levels did not appear to make a significant difference in the four indices of the EEI, HCAAF, GSI, and NIQ, when controlling for the variables. The adoption of diversity management in the public sector has mitigated social problems while providing federal employees the ability to explore

new opportunities (Fernandez et al., 2015). Given that the organizational diversity climate represents the conceptual framework, there was an assumption that participants rated diversity management favorably in the survey for all agencies (Fernandez et al., 2015).

Limitations of the Study

A key limitation was that, because I did not collect the data, I had no control over what was contained in the data set. A significant disadvantage of using secondary data is that the analyst has no knowledge of exactly how the data collection process was done and how well it was carried out. Often times this can limit the analysis or alter the original questions the researcher sought to answer.

Recommendations

Based on the outcomes of this report, several recommendations should be considered. Researchers should continue to analyze incoming the FEVS data. With the release of annual the FEVS reports, managers should continue to analyze the FEVS data and be available to work with bureaus on how to interpret and communicate post specific results. Additionally, the following actions are recommended:

- Those lower performing agencies should conduct focus groups and roundtable discussion with human resource policy offices for opportunities to improve.
- Agencies should conduct quarterly data-driven reviews to better understand and use the FEVS data to assess agency performance.

- Human resource departments should use the FEVS data to review the agency's strengths and challenges, and identify strategies to help improve engagement practices.
- Across agencies diversity management programs should pilot programs across agencies to support the LGBT community as well as other minority groups.
- Across agencies create a private-public partnership initiative across agencies to promote efficiencies and effectiveness.
- The OPM should leverage the best practices of those agencies that have employee engagement scores that exceed the agency-wide score and provide support to those agencies that have employee engagement scores below the department-wide score.
- Scholars could use the FEVS data to support a longitudinal study by addressing future organizational improvements in federal agencies.

Implications for Social Change

As I mentioned previously, the FEVS is a confidential survey that measures engagement by asking employees a range of questions to better understand, for example, if their managers communicate the goals and priorities of their organization, their supervisors support employee development, and their work gives them a feeling of personal accomplishment. This feedback can enable agencies to find what works and where improvement is needed. Changing the workforce culture to address employees' and managers' perceptions would provide advantages not only for employees and managers but also for American citizens.

Creating innovating ideas for the 21st-century workforce would help implement the NPM ideologies. Public management and diversity scholars and practitioners could explore and provide guidance on how to best coordinate their studies to promote organizational excellence. This study may spark the interest of public choice scholars who focus on allowing the employees the choice to reach self-preservation and economic growth (Bovaird & Loffler, 2009). The NPM and NPS practitioners may find the study interesting in how to improve global satisfaction (job, pay, organization, and good place to work) by introducing private sector and business approaches across government (Denhardt & Denhardt, 2011).

Although this study showed no major impact among employees in different agencies when factoring gender, age, and education, there is a need for improved practices across agencies. Diversity and inclusion practitioners are still challenged with establishing programs in the workforce across federal agencies. Even though gender was not impacted in this study, it can affect the LGBT culture when addressing diversity and inclusion practices.

Lastly, the study adds to empirical research about understanding the behaviors of federal employees and managers and how the president's administration, government senior leadership, the OPM, scholars, and practitioners can find new ways to value people and not just productivity in the workplace. I can use the FEVS data, along with many other data sources, as a catalyst for initiating changes that I believe can help the agencies recruit and retain a workforce committed to the mission of federal agencies.

Conclusions

The purpose of this study was to investigate, analyze, and determine whether a correlation existed between the employees of higher and lower performing federal agencies as measured by the four indices of the FEVS, namely, the EEI, HCAAF, GSI, and the NIQ, when controlling for gender, age, and education. The aim was to determine whether the variables of gender, age, and education affected the relationship between the employees of the two groups of federal agencies. Essentially, employee engagement captures the employees' relationship with their work and the workplace. Employees must have a sense of purpose and display dedication, persistence, and an overall attachment to their organization and its mission.

Having an engaged workforce is critical to the federal government's ability to fulfill its mission to serve the American people. Engaged employees are more likely to give their best, work more effectively in teams, share their ideas and creativity, and contribute more at work. Given the challenges facing the United States and the federal workforce, it is essential that that all federal agencies strive to foster a culture of excellence and support their employees so they can reach their full potential.

References

- Andrews, L., Higgins, A., Andrews, M., & Lalor, J. G. (2012). Classic grounded theory to analyze secondary data: Reality and reflections. *Grounded Theory Review, 11*, 12-26.
- Babbie, E. R. (2012). *The practice of social research*. Belmont, CA: Wadsworth.
- Behn, R. D. (1995). The big questions of public management. *Public Administration Review, 55*, 313-324. doi:10.2307/977122
- Blanchard, K. H., Zigarmi, D., & Nelson, R. B. (1993). Situational leadership after 25 years: A retrospective. *Journal of Leadership & Organizational Studies, 1*, 21-36. doi:10.1177/107179199300100104
- Boekhorst, J. A. (2015). The role of authentic leadership in fostering workplace inclusion: A social information processing perspective. *Human Resource Management, 54*, 241-264. doi:10.1002/hrm.21669
- Bovaird, T., & Loffler, E. (2009). *Public management and governance*. New York, NY: Taylor & Francis.
- Boyle, P., & Whitaker, G. (2001). Educating for the new public service: Implications of the transformation of governance. *Journal of Public Affairs Education, 267-279*. doi:10.3998/mpub.7229
- Buchanan, J. M. (1984). Politics without romance: A sketch of positive public choice theory and its normative implications. In J. M. Buchanan & R. D. Tollison (Eds.), *The theory of public choice II* (pp. 11-22). Ann Arbor, MI: University of Michigan Press.

- Buchanan, J. M., & Tollison, R. D. (1984). *The theory of public choice II*. Ann Arbor, MI: University of Michigan Press.
- Callahan, J. (2015). Commentary: From results to action: Using the Federal Employee Viewpoint Survey to improve agencies. *Public Administration Review*, 75, 399-400. doi:10.1111/puar.12372
- Calvert, R. L., McCubbins, M. D., & Weingast, B. R. (1989). A theory of political control and agency discretion. *American Journal of Political Science*, 33, 588-589. doi:10.2307/2111064
- Clark, P. M. (2015). Diversity and inclusion is an agency imperative. *Public Manager*, 44(2), 42-45. Retrieved from: <https://search-proquest-com.ezp.waldenulibrary.org/docview/1688659631?accountid=14872>
- Denhardt, J.V., & Denhardt, R.B. (2000). The new public service: Serving, rather than steering. *Public Administration Review*, 60(6), 549-559. doi:10.1111/0033-3352.00117
- Denhardt, J. V., & Denhardt, R. B. (2015). *The new public service: Serving, not steering*. 4th Edition, New York, NY
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38(1), 105-124. Retrieved from <https://search-proquest-com.ezp.waldenulibrary.org/docview/1020696142?accountid=14872>
- Fatovic, C. (2004). Constitutionalism and presidential prerogative: Jeffersonian and Hamiltonian perspectives. *American Journal of Political Science*, 48, 429-444. doi:10.1111/j.0092-5853.2004.00079.x

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analysis. *Behavior Research Methods, 41*, 1149-1160. doi:10.3758/BRM.41.4.1149
- Fernandez, S., Cho, Y. J., & Perry, J. L. (2010). Exploring the link between integrated leadership and public sector performance. *The Leadership Quarterly, 21*, 308-323. doi:10.1016/j.leaqua.2010.01.009
- Fernandez, S., & Moldogaziev, T. (2015). Employee empowerment & job satisfaction in the U.S. federal bureaucracy: A self-determination theory perspective. *American Review of Public Administration, 45*, 375-401. doi: 10.1177/0275074013507478
- Fernandez, S., Resh, W. G., Moldogaziev, T., & Oberfield, Z. W. (2015). Assessing the past and promise of the Federal Employee Viewpoint Survey for public management research: A research synthesis. *Public Administration Review, 75*, 382-394. doi:10.1111/puar.12368
- Finer, H. (1941). Administrative responsibility in democratic government. *Public Administration Review, 1*, 335-350. doi:10.2307/972907
- Frederickson, H. G., Smith, K., Larimer, C., & Licari, M. (2011). *Public administration theory primer* (2nd ed.). Boulder, CO: Westview Press.
doi:10.1093/jopart/muq087
- Goldenkoff, R. (2015). Commentary: The Federal Employee Viewpoint Survey: A practitioner's view of using the data. *Public Administration Review, 75*, 397-398.
doi:10.1111/puar.12375

- Jung, C. S. (2010). Predicting organizational actual turnover rates in the US federal government. *International Public Management Journal*, 13, 297-317.
doi:10.1080/10967494.2010.504124
- Hersey, P., & Blanchard, K. H. (1982). Grid principles and situationalism: Both! A response to Blake and Mouton. *Group & Organization Studies (pre-1986)*, 7, 207.
doi:10.1177/105960118200700207
- Holton, E. F., & Burnett, M. F. (2005). The basics of quantitative research. In R. A. Swanson & E. F. Holton, III (Eds.), *Research in organizations: Foundations and methods of inquiry* (pp. 29-44). New York, NY: Routledge.
- Ingraham, P. W., Rosenbloom, D. H., & Edlund, C. (1989). The new public personnel and the new public service. *Public Administration Review*, 116-126.
doi:10.2307/977330
- Kaboolian, L. (1998). The new public management: Challenging the boundaries of the management vs. administration debate. *Public Administration Review*, 58, 189-193. doi:10.2307/976558
- Kellough, E., & Naff, E. (2004). Responding to a wake-up call: An examination of federal agency diversity management programs. *Administration & Society*, 36, 62-90. doi:10.1177/0095399703257269
- Keppel, G., & Zedeck, S. (1989). *Data analysis for research designs: Analysis of variance and multiple regression/correlation approaches*. New York, NY: W.H. Freeman and Company.
- Kettl, D. F. (2002). *The transformation of governance: Public administration for twenty-*

- first century America*. Baltimore, MD: Johns Hopkins University Press.
- Köllén, T. (2016). Lessening the difference is more: The relationship between diversity management and the perceived organizational climate for gay men and lesbians. *International Journal of Human Resource Management*, 27, 1967-1996.
doi:10.1080/09585192.2015.1088883
- Lee, K. S. (2015). Commentary: The balancing act: Addressing the needs of federal managers and researchers through the Federal Employee Viewpoint Survey. *Public Administration Review*, 75, 395-396. doi:10.1111/puar.12368
- Levasseur, R. (2011). *Dissertation research: An integrative approach*. St. Augustine, FL: MindFire Press.
- Lynn, L. E., Jr. (2001). The myth of the bureaucratic paradigm: What traditional public administration really stood for. *Public Administration Review*, 61(2), 144-160.
doi:10.1111/0033-3352.00016
- Michalski, W., Miller, R., & Stevens, B. (2008). *Governance in the 21st Century*. Future Studies.
- Moore, J. (2015). The 15 most innovative agencies in government. Nextgov. Retrieved from <https://www.Nextgov.com/cio-briefing/2015/12/15-most-innovative-agencies-government/124284/>
- McNabb, D. E. (2015). *Research methods for political science: Quantitative and qualitative methods*. New York, NY: Routledge.
- Neuman, W. L. (2009). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston, MA: Allyn and Bacon.

- Obama, M. (2014). Memorandum for the heads of executive departments and agencies. Retrieved from <https://www.whitehouse.gov/sites/default/files/omb/memoranda/2014/m-14-12.pdf>
- Office of Management and Budget. (2014). Strengthening employee engagement and organizational performance M-15-04. Retrieved from <https://obamawhitehouse.archives.gov/sites/default/files/omb/memoranda/2015/m-15-04.pdf>
- Office of Management and Budget. (2016). *Analytical perspectives*. Retrieved from https://www.whitehouse.gov/omb/budget/Analytical_Perspectives
- Office of Personnel Management. (n.d.). *OPM supervisor competencies – definitions*. Retrieved from <http://www.usgs.gov/humancapital/documents/OPMSupvCompDef.pdf>
- Office of Personnel Management. (2014). *2014 Federal Employee Viewpoint Survey*. Retrieved from <http://www.fedview.opm.gov/2014/>
- Office of Personnel Management. (2015). *Analytical perspectives budget of the U.S. Government, Fiscal Year 2017*. Retrieved from http://www.whitehouse.gov/omb/budget/Analytical_Perspectives/
- Office of Personnel Management. (2016). *Fedscope*. Retrieved from <https://www.opm.gov/policy-data-oversight/data-analysis-documentation/fedscope>
- Osborne, D., & Plastrik, P. (1997). *Banishing bureaucracy: The five strategies for reinventing government*. Reading, MA: Addison-Wesley.

- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*: Open University Press.
- Park, S. M. (2012). Toward the trusted public organization untangling the leadership, motivation, and trust relationship in US federal agencies. *American Review of Public Administration*, 42, 562-590. doi:10.1177/0275074011410417
- Parker, C. (2014). *The 2013 government shutdown affected federal workers and the U.S. economy*. Retrieved from <http://news.stanford.edu/news/2014/September/shutdown-siepr-paper-092514.html>
- Pearce, C. L., & Conger, J. A. (2003). All those years ago. *Shared leadership: Reframing the hows and whys of leadership*, Sage.
- Pitts, D. W., Hicklin, A. K., Hawes, D. P., & Melton, E. (2010). What drives the implementation of diversity programs? Evidence from public organizations. *Journal of Public Administration Research and Theory*, 20, 867-886. doi:10.1093/jopart/mup044
- Pitts, D. W., Marvel, J., & Fernandez, S. (2011). So hard to say goodbye? Turnover intention among U.S. federal employees. *Public Administration Review*, 71, 751-760. doi:10.1111/j.1540-6210.2011.02414.x
- Pulido-Martos, M., Augusto-Landa, J. M., & Lopez-Zafra, E. (2012). Sources of stress in nursing students: A systematic review of quantitative studies. *International Nursing Review*, 59, 15-25. doi:10.1111/j.1466-7657.2011.00939.x
- Sanchez, M. E. (1992). Effects of questionnaire on the quality of survey data. *Public Opinion Quarterly*, 56, 205-217. doi:10.1086/269311

- Sayre, W. S. (1958). Premises of public administration: Past and emerging. *Public Administration Review*, 18, 102-105. doi.org/10.2307/973789
- School of Public Affairs. (2016). *6 ways research can empower the federal workforce*. Retrieved from <http://www.american.edu/spa/news/6-ways-research-empowers-federal-workforce-03092016.cfm>
- Soni, V. (2000). A twenty-first-century reception for diversity in the public sector: A case study. *Public Administration Review*, 60, 395-408. doi:10.1111/0033-3352.00103
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Needham Heights, MA: Allyn & Bacon.
- Thomas, R. R., Jr. (2006). Diversity management: An essential craft for leaders. *Leader to Leader*, 2006(41), 45-49. doi:10.1002/ltl.191
- Tullock, G., Brady, G. L., & Seldon, A. (2002). *Government failure: A primer in public choice*. Washington, DC: Cato Institute.
- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *Leadership Quarterly*, 17, 654-676.
doi: 10.1016/j.leaqua.2006.10.007
- Uhl-Bien, M., & Ospina, S. M. (Eds.). (2012). *Advancing relational leadership research: A dialogue among perspectives*. IAP.