Understanding the Role of Middle Managers: A Case Study of the U.S. Environmental Protection Agency

BY

ALEEA L. PERRY B.A., Butler University, 1996 M.P.A., Indiana University, 1999

THESIS

Submitted as partial fulfillment of the requirements for the Degree of
Doctor of Philosophy in Public Administration in the Graduate College of the
University of Illinois at Chicago, 2016

Chicago, Illinois

Defense Committee:

James Thompson, Chair and Advisor, Public Administration Allyson Holbrook, Public Administration Michael Siciliano, Public Administration Sharon Mastracci, University of Utah Barton Wechsler, University of Missouri This thesis is dedicated to Dr. Peter J. Bergerson, for his encouragement of my dream.

This thesis is also dedicated to John R. Higgins, for his love & support.

Finally, this thesis is also dedicated to Dr. James R. Thompson, for his guidance & patience.

There are no words meaningful enough to express my thanks to each of you.

Please accept this dedication as a small token of my gratitude.

ACKNOWLEDGEMENTS

Thank you to my committee, Dr. James R. Thompson, Dr. Allyson Holbrook, Dr. Michael Siciliano, Dr. Sharon Mastracci, and Dr. Barton Wechsler, for their guidance, thoughtful questions, and for insightful comments. You honored me by agreeing to serve, and blessed me with your knowledge.

For this, I am profoundly grateful.

Thank you to the U.S. Office of Personnel Management for providing answers to my many questions and for creating a specialized subset of FEVS data for this study. Especial thanks to Mr. Craig Simons of the Office of Personnel Management for his willingness to explain the many nuances of the FEVS to me.

Thank you to my interviewees at the Environmental Protection Agency. Although you are anonymous in this dissertation, know that without your candor and willingness to speak about your agency and region, this study would have never been completed

TABLE OF CONTENTS

<u>CHAPTE</u>	<u>R</u>	<u>PAG</u>
<u>I.</u>	INTRODUCTION. A. Background. B. The Study. C. Data. D. Research Questions. E. Significance of the Study.	1 1 2 4 5 6
<u>II.</u>	BACKGROUND OF THE STUDY A. Introduction. B. Federal Employee Viewpoint Survey. C. Best Places to Work in the Federal Government. D. Agency and Its Regions to Be Studied.	8 8 9 11 14
<u>III.</u>	CONCEPTUAL FRAMEWORK AND RELATED LITERATURE A. Middle Management in the Literature. 1. Public Administration Literature and Middle Managers. 2. EPA Organizational Structure within the Literature. B. Definitions of Employee Satisfaction and Work Commitment. C. Work Motivation and PPS' BPTWFG Index Score. D. Executive Interventions, Supervisory Interventions, and Middle Management Interventions. 1. Executive interventions: work motivation. 2. Supervisor interventions: work motivation. 3. Middle management interventions: work motivation.	20 20 23 24 26 27 29 30 32 34
<u>IV.</u>	METHODS A. Case Study Development 1. Unit of analysis, data 2. Criteria for interpretation B. Mixed Methods Approach 1. Case Selection 2. Data Collection and Interviews 3. Coding Data	37 37 38 44 44 49 52 52
<u>V.</u>	CASE STUDY OF THREE REGIONS. A. Introduction. B. Region A. 1. Initiated middle management interventions. 2. Modified and pass-through executive interventions by middle management.	56 57

TABLE OF CONTENTS

	C. Region I	
	 Initiated middle management interventions	65
	management	69
	D. Region D.	
	1. Initiated middle management interventions	
	2. Modified and pass-through executive interventions by middle	75
	·	75
VI.	FINDINGS	80
	A. Introduction.	80
	B. Descriptive Information About Interviewees	81
	C. Interventions	83
	D. Research Question 1: What is the role of middle managers in a large organization?	85
	1. Middle managers are cultural and communications touchstones	86
	2. Middle managers impact participatory decision-making	88
	3. Middle managers translate policies into practice	89
	E. Research Question 2: Do middle managers act primarily to	
	Implement the directives of those at the executive level, or do they	
	Initiate their own initiatives?	91
	F. Research Question 3: How consequential are middle management	-
	interventions with regard to employee work motivation?	94
<u>VII.</u>	DISCUSSION	98
	A. Role of the Middle Manager	98
	B. Types of Interventions Utilized by Middle Managers	106
	C. Names of Interventions Initiated by Middle Managers	107
	D. Interventions in this Study Consequential to Work Motivation	108
VIII.	CONCLUSIONS	111
<u> </u>	A. Limitations.	111
	B. Future Research.	116
	NDICES	121
	LITERATURE	135
VITA.		144

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
I.	EPA REGIONAL OFFICES AND BEST PLACES TO WORK IN THE	
	FEDERAL GOVERNMENT INDEX SCORES	. 19
II.	WORK MOTIVATION BY ORGANIZATIONAL LEVEL	. 36
III.	LIST OF INTERVIEWEES AND REGION	42
IV.	REGIONAL OFFICE WORKFORCE LEVELS AND FEVS RESPONSE	
	FY10-FY14	. 43
V.	VARIABLES & CASE SELECTION	. 48
VI.	CODE DEFINITIONS	55
VII.	INTERVIEWEE DESCRIPTIVE STATISTICS	82
VIII.	INTERVENTIONS	84
IX.	MIDDLE MANAGEMENT INTERVENTIONS BY REGION	93
X.	ROLE OF THE MIDDLE MANAGER IN THE LITERATURE AND	
	STUDY FINDINGS.	105

LIST OF FIGURES

FIC	GUR	<u>re</u>	<u>PAGE</u>
	1.	EPA Agency Organizational Chart	18
	2.	Regional Organizational Chart	25
	3.	Regions A, I, & D	51
	4.	Region A BPTWFG Scores 2010-2015	63
	5.	Region A BPTWFG Percentage Change Over Time	64
	6.	Region I BPTWFG Scores 2010-2015	72
	7.	Region I BPTWFG Percentage Change Over Time	73
	8.	Region D BPTWFG Scores 2010-2015	79
	9.	Region D BPTWFG Percentage Change Over Time	80
	10.	Comparison of Region A and Region D BPTWFG Scores	96
	11.	Comparison of Region A and Region D BPTWFG Percentage Change	
		Over Time 2010-2015	97

LIST OF ABBREVIATIONS

BPTWFG Best Places to Work in the Federal Government

CHCO Chief Human Capitol Officer

EPA Environmental Protection Agency

EVS Federal Employee Viewpoint Survey (as referred to by EPA employees)

FEVS Federal Employee Viewpoint Survey

OPM Office of Personnel Management

PPS Partnership for Public Service

SUMMARY

This study seeks to investigate the role of middle managers in large, complex organizations. There is a lack of clarity in the management literature as to whether and to what extent actions taken at this level of the organization are consequential for organizational outcomes. This study investigates the role of middle managers in the context of a specific organizational phenomenon – employee work motivation. The study finds that middle managers' interventions are present and consequential to employee work motivation.

I. INTRODUCTION

A. Background

The study of management within organizations has been a focus for researchers and practitioners both in the theoretical and applied fields. One of the foci of management studies includes the concept of management levels and their roles – from the supervisory level to the middle management level and finally to the executive level. These levels are often discussed in terms of how those at the different levels of management impact the organizations they serve by their actions. Within the management literature, the roles of those at the supervisory and executive levels have been explored extensively while those at the middle management level have been the subject of considerably less research. This study seeks to help fill this gap in the literature by exploring middle management actions in the framework of the federal government through a specific organizational phenomena, that of work motivation.

The concepts and constructs of employee satisfaction and organizational commitment have long been topics of interest for both public sector and private sector researchers. These concepts are often combined into one construct known as work motivation (Hulin, 1991; Harrison, Newman, & Roth, 2006; Moynihan & Pandey, 2007). The questions of what motivates employees to excel in their positions, what influences an employee to stay at an organization long-term, and how employers can encourage employees to be committed to the organization have afforded a vast literature which considers both internalities (those concepts which employers may influence within the organization to impact employees' work motivation) and externalities (those outside influences that may impact employees' work motivation). In this study, the focus is on internalities, that is, those actions on the part of middle managers designed to impact work motivation.

B. The Study

In the management literature the roles and actions of managers have been explored but the focus has been primarily on those at the executive and supervisory levels. Specifically within the work motivation literature, executive-level interventions shown to have impacted subordinate work motivation include, organizational learning culture (Garvin, 1993, Joo & Park, 2010); benefits (Eskildsen & Nüssler, 2000; Blau, Merriman, Tatum, & Rudmann, 2001; Wright & Davis, 2003); leadership and leadership behaviors (Glisson & Durick, 1988; Currivan, 1999; Eskildsen & Nüssler, 2000); organizational policies, practices, and programs (Howard & Frink, 1996; Balfour & Wechsler, 1996; Saltzstein, Ting & Saltzstein, 2001; Kinnie, Hutchinson, Purcell, Rayton, & Swart, 2005); and work experiences (Balfour & Wechsler, 1996). At the supervisory level, interventions shown to have impacted subordinate work motivation are leadership behaviors and support (Bateman & Strasser, 1984; Glisson & Durick, 1988; Currivan, 1999; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Wright & Davis, 2003); effective supervision (Balfour & Wechsler, 1996; Howard & Frink, 1996; Ting, 1997; Fernandez, 2008); trust (Nyhan, 1999); opportunity for advancement (Balfour & Wechsler, 1996; Moynihan & Pandey, 2007); and communication and participation (Balfour & Wechsler, 1996; Wright & Davis, 2003; Madlock, 2008).

These studies have a common focus, management action, and fit within a common literature, work motivation, but focus only on either the supervisory level or executive level. By focusing on just the executive level of management or on the supervisory level of management, a level of management is excluded – the middle management level. This study has been designed to address that gap in the literature. A key question is; are middle managers just a pass-through

level of management or do middle managers and their actions impact the organization much like the actions of those at the executive and supervisory levels have been shown to do?

Middle management has been defined by Uyterhoeven (1989) as the level of management in the organization which plays three roles: subordinate, equal, and superior. Middle managers are subordinate to the upper management level, equal to managers at their same level, and serve as superiors to the managers at the subordinate level (Likert, 1961; Uyterhoeven, 1989, Fenton-O'Creevy, 1998). However, middle managers do more than just serve as a mid-point in the managerial hierarchy, they also may also serve as a means for geographically disconnected upper management to serve a local area or region (Floyd & Wooldridge, 1999; Balogun & Johnson, 2004). Additionally, Floyd and Wooldridge (1992) developed a typology which identified four roles for middle managers relating to the development of an organizational strategy: championing alternatives, facilitating adaptability, synthesizing information, and implementing deliberate strategy (p. 154).

According to Floyd and Wooldridge's (1992) typology of middle manager roles in the strategy process, middle managers who fall in the "synthesizing information" category are known for passing information to upper levels of management about actions within and outside the organization which affect operations, while middle managers who "facilitated adaptability" are known for flexibility in organizational arrangements such as information sharing through informal work groups. These work groups are often given some autonomy and flexibility in their actions and are encouraged to respond to changing conditions by the middle manager. Another strategic function of middle managers according to Floyd and Wooldridge is the implementation of upper management strategy. Finally, Floyd and Wooldridge noted that middle managers also have a key role in championing alternatives to strategies developed at the executive level. While

these studies have provided insight into what form middle management actions can take, they do not address whether these actions are consequential – in other words, do the actions of middle managers matter? For example, do middle managers develop their own actions and are these actions consequential? Can all middle management actions be placed only within the typology defined by Floyd and Wooldridge or are there other possible actions not identified within this typology? The research questions to be addressed in this study are identified and discussed in Section, D. Research Questions.

C. Data

This study uses the Partnership for Public Service's (PPS) *Best Places to Work in the Federal Government* (BPTWFG) index scores to investigate the impact of middle management interventions on work motivation. The index score is said to measure federal employees' satisfaction with and commitment to their respective federal agencies and will be used as a proxy measure of employee work motivation within this study. These index scores were developed from three questions from the Office of Personnel Management's (OPM) Federal Employee Viewpoint Survey (FEVS), a survey administered annually or bi-annually to all federal employees since 2002. Partly as a consequence of the attention afforded the BPTWFG results, Federal agencies, including OPM and others, have become increasingly interested in ways they may positively impact motivation of employees.

In 2015, OPM noted that a high level of employee satisfaction correlates with reduced turnover, lower recruitment costs, better productivity, and customer satisfaction (p. 9). An earlier report to Congress by the U.S. Merit Systems Protections Board (2012) discussed the need to support high levels employee work motivation for in the federal government. In the report, the U.S. Merit Systems Protection Board identified five characteristics that have consequences for

employee motivation, including: skill variety, task identity, task significance, autonomy, and feedback (2012, p. i). In their analysis, the U.S. Merit Systems Protection Board discussed how federal employee responses to FEVS questions can be utilized to ascertain the motivation levels of a particular agency's workforce and stated that federal employees were not focused solely on monetary awards for motivation.

For the purpose of this study, there was a need to identify a federal agency with BPTWFG data available for each of the years from 2010 to 2015. In the initial search, a number of federal agencies were identified including the National Aeronautics and Space Administration, the Department of State, the Armed Forces, and the Environmental Protection Agency (EPA), all of which had BPTWFG scores available. As this study's focus was that of middle managers, it was imperative to choose an agency for which regional-level BPTWFG data was also available. The EPA met this criteria as it had regional-level managers and, more importantly, BPTWFG data available for each of the regions. A deeper discussion of FEVS, BPTWFG, and the EPA can be found in Chapter II: Context of Study.

D. Research Questions

This study addresses three research questions designed to address the gap in the literature regarding middle management actions. The data compiled in the course of this investigation allows conclusions to be drawn as to whether and to what extent middle managers are consequential in the context of employee work motivation. Middle management actions are the primary focus of this study and the study uses work motivation literature to illustrate the limited research on middle management actions. Previous research has highlighted the impact of those at both the supervisory and executive levels of management on employee work motivation, while

the impact of those actions at the middle management has largely been neglected. The study's research questions are as follows:

- 1. What is the role of middle managers in a large organization?
- 2. Do middle managers act primarily to implement the directives of those at the executive level, or do they initiate their own initiatives?
 - a. If it is the latter, what is the nature and extent of their impact?
- 3. How consequential are middle management interventions with regard to employee work motivation?

The first question was designed to investigate the role of middle managers in a large organization. The venue for the study is the EPA, a federal government agency with over 15,000 employees. The second research question seeks to identify whether the middle managers of interest initiated their own interventions to impact work motivation or whether they simply implemented directives from the executive level. This question was designed to determine whether middle management interventions have an impact separate from those initiated at other management levels. The third research question attempts to assess the extent to which middle management interventions impact employee work motivation.

E. Significance of the Study

For the purpose of this study, "middle management" refers to the regional administrator level of the EPA which represents an intermediate level between the agency executive and first-line supervisors. Research on the impact of middle managers on employee work motivation has not kept pace with that relating to that of the executive level and first-line supervisory level. This study is designed first describe the role of the middle managers in a large organization as well as to gain a greater understanding of their actions and activities. The study then categorizes the

actions as either, 1) passing through the interventions of the executive level, 2) modifying the interventions of the executive level, or 3) initiating the middle managers' own interventions. Finally, the study looks at all the middle manager actions and discusses whether the actions were consequential to employee work motivation in the region.

In this study, interviews with regional-level employees, BPTWFG data, and documents received from interviewees detailing middle management interventions in their respective regions will serve as a source of "rich data," identified by Maxwell (2008) as essential to validity (p. 110). Validity tests, such as "intensive, long-term involvement, 'rich' data, respondent validation, intervention, searching for discrepant evidence and negative cases, triangulation, quasi-statistics, and comparison," described by Maxwell and further discussed in Chapter IV: METHODS, will ensure that this study is methodologically rigorous (p. 110-113).

II. BACKGROUND OF THE STUDY

A. Introduction

The broader purpose of this research is to investigate whether and to what extent interventions at the middle management level have an independent and separable impact on organizational outcomes. The focus here on employee work motivation allows the broader question to be investigated in a specific context. The constructs of employee satisfaction and organizational commitment have been thoroughly discussed in the literature as elements essential to understanding the motivations of private- as well as public-sector employees, and are combined under the concept of "work motivation" for the purposes of this study. Research published in both business and public administration journals has noted how work motivation can be impacted by employers, both public and private.

The President, Congress, Office of Personnel Management (OPM), federal agencies, and other parties are interested in how the motivation of federal employees can be impacted by agency actions and activities. The federal government has included survey items relating to work motivation in its Federal Employee Viewpoint Survey (FEVS) administered by OPM. Following the release of the FEVS each year, a non-profit and non-partisan organization, the Partnership for Public Service (PPS), generates a report entitled the *Best Places to Work in the Federal Government*® (BPTWFG), which ranks each federal agency according to the combination of the answers to three questions from the FEVS into one index score.

Congress has taken note of the BPTWFG index score rankings of a number of agencies, such as the Broadcasting Board of Governors. For example, that agency's BPTWFG rankings have

been referenced in the Congressional Record in the testimony about the United States International Communications Reform Act of 2014:

"The annual survey conducted by the "Partnership for Public Service" consistently ranks the Broadcasting Board of Governors at or near the bottom of all Federal agencies in terms of "overall best places to work" and "the extent to which employees feel their skills and talents are used effectively." The consistency of these low scores point to structural, cultural and functional problems at the Broadcasting Board of Governors" (Congressional Record, July 28, 2014, H6887).

In an April 27, 2016 hearing of the House Committee on Oversight and Government Reform, Subcommittee on Government Operations, the committee reached out to those agencies at the top of the BPTWFG rankings and those at the bottom in an effort to understand federal employees' work motivation. Chief Human Capital Officers (CHCOs) from four agencies, as well as the PPS' President and CEO testified. The four agencies testifying included the National Aeronautics and Space Administration, the Department of Labor, the Department of Homeland Security, and the Department of Housing and Urban Development. Each CHCO offered information and explanations for their respective agency's BPTWFG scores (The Best and Worst Places to Work in the Federal Government, 2016). While these agencies represent both high and low index scores, the committee was focused on how to improve overall federal employee work motivation.

B. Federal Employee Viewpoint Survey

The OPM began administering the Federal Human Capital Survey in 2002 to capture federal employees' assessments of their agencies, and to determine if those agencies were exhibiting indicators of successful organizations. In 2010, the name of the survey was changed to the Federal Employee Viewpoint Survey (FEVS) (Office of Personnel Management, n.d.1). Since 2002, OPM has conducted surveys in 2002, 2004, 2006, 2010, 2011, 2012, 2013, 2014, and 2015

(Office of Personnel Management, n.d.2). In 2015, the survey was administered electronically to 839,788 full-time, non-seasonal federal employees of both large, small, and independent agencies, representing, "over 97 percent of the executive branch workforce" (Office of Personnel Management). There were 392,752 employees who completed the FEVS, representing a response rate of 46.8% for 2015 (Office of Personnel Management). The survey was, "designed to produce results by supervisory status (non-supervisor, supervisor, and executive)" (Office of Personnel Management). Finally, the survey data collected was weighted to address issues of bias as response rates among different demographic groups may vary, and supervisors and executives may be over-represented in the non-adjusted results.

The 2015 FEVS included demographic questions and eighty-four items in seven categories: My Work Experience, My Work Unit, My Agency, My Supervisor, Leadership, My Satisfaction, and My Work Life (Office of Personnel Management, n.d.3). A full list of the 2015 FEVS questions can be found in Appendix A. The first nineteen survey questions in the section, "My Work Experience" concern an employee's immediate work environment, including questions on the physical conditions of the office, personnel evaluations, and workload. In the category "My Work Unit," employees are asked to rate their immediate work unit, with questions relating to promotions, poor performance, knowledge sharing, and work quality in nine questions. There are thirteen items in the category "My Agency," which provide employees an opportunity to answer questions of the overall agency environment, including physical security, discrimination, diversity of the workforce, and mission. This section includes a question used by the PPS in their index score, "I recommend my organization as a good place to work" (Office of Personnel Management).

The categories, "My Supervisor" and "Leadership," have five questions each focused on senior leaders, supervisors, and managers in the employee's agency. Questions related to trust, performance, agency goals, communication, and work/life balance are found in this category. Nine questions are found in the category "My Satisfaction," all related to the level of satisfaction the employee has with his/her received information, training, pay, organization, and decision-making. Within this category are the two remaining questions used by the PPS in their index score. These are, "considering everything, how satisfied are you with your job", and, "considering everything, how satisfied are you with your organization" (Office of Personnel Management, n.d.3). The final questions of the 2015 FEVS in the category "My Work Life" are questions relating to work/life programming instituted by the federal government, such as telework, alternative work schedules, health and wellness programs, employee assistance programs, child and elder care programs. The questions ask if the employee is participating in the programming above, and if so, the level of satisfaction with the programming.

C. Best Places to Work in the Federal Government

In 2003, the Partnership for Public Service (PPS) released its first *Best Places to Work in the Federal Government*® (BPTWFG) rankings for federal agencies. These rankings were based on an index score created by combining the answers to the three¹ questions found in the Office of Personnel Management's (OPM) Federal Employee Viewpoint Survey (FEVS). These three questions are:

• "I recommend my organization as a good place to work.

¹ The original formula used four questions, however, a restructuring of the index score system in 2007 removed the fourth question and previous years (2003 and 2005) were recalculated to show the revised index scores (Partnership for Public Service, personal communication, September 8, 2014).

- Considering everything, how satisfied are you with your job?
- Considering everything, how satisfied are you with your organization?"(Best Places to Work, n.d.1).

"The index score² measures the performance of agencies and agency subcomponents related to employee satisfaction and commitment" (Partnership for Public Service, n.d.). In the last thirteen years, there have been ten BPTWFG rankings of federal agencies, broken down by large agencies, mid-size agencies, small agencies, and sub-agency components. The BPTWFG report is issued each year following the release of the FEVS data. In addition to the BPTWFG reports, PPS also offers reports on individual agencies, year-to-year changes in scores, and reports on particular components of the FEVS.

According to the BPTWFG website, news agencies, such as the *Washington Post*, *Politico*, *Federal News Radio*, *The Huffington Post*, *The Daily Beast*, *Federal Times*, *National Journal* and *PBS NewsHour*, have all reported on the 2015 rankings and prior years' survey results have received similar news coverage. While news coverage may be of interest to the public, what is more important is the fact that agencies and Congress are paying attention. In an example of agency focus, NASA wanted to keep its high BPTWFG ratings and as such, NASA reviewed and noted the management style differences between their own highly-rated practices and those of low-rated agencies. According to Newell (2010), NASA achieved its high ratings by focusing on, "open-door management policies, monthly all-hands meetings, e-mail messages directly from senior leaders, brownbag lunches, off-site retreats and team-building sessions" to help ensure continued ratings success (p. 53).

² The index is weighted according to the extent to which each question predicts "intent to remain" (Partnership for Public Service, n.d.).

In 2009, Department of Transportation ranked last among large federal agencies in the BPTWFG ratings. To address this issue, then-Secretary Ray LaHood, "added an employee satisfaction goal to Senior Executive Service performance plans," an action that had not been included in prior years (Newell, 2010, p. 54). While the initial focus on employee satisfaction was centered on the Senior Executive Service, Secretary Ray LaHood also initiated work motivation efforts targeted at all employees and, "established new areas for improvement: encouraging creativity and innovation, expanding work-life opportunities, and ensuring fairness and consistency in performance awards" (Newell, p. 54). By 2010, the Department of Transportation had moved up five places from their ranking in 2009 (Newell).

In December 2013, PPS (in conjunction with Deloitte) produced a report entitled: "Ten Years of the Best Places to Work in the Federal Government® Rankings: How Six Federal Agencies Improved Employee Satisfaction and Commitment," which highlighted the efforts of the Patent and Trademark Office, the National Aeronautics and Space Administration, the Department of State, the Department of Transportation, the United States Mint, and the Nuclear Regulatory Commission to impact their work motivation scores. Representatives from each agency were contacted to discuss their efforts to improve their work motivation scores and the report identified lessons for other federal agencies based on the success of these six agencies. The report identified approaches used to improve BPTWFG rankings and hence work motivation including; "owning the change" – a call for agency executives to be held responsible for the results of the employee survey data and for the data to be used to evaluate agency leadership and for agency executives to "go for quick wins" by using employee feedback to design activities to address short- and long-term cultural changes (Partnership for Public Service and Deloitte 2013, p. 23). Although the report from the PPS and Deloitte offered a number of recommendations on

how to positively impact work motivation, it should be noted that each of these recommendations was targeted at executive-level interventions, rather than at the middle management level.

D. Agency and Its Regions to be Studied

The Environmental Protection Agency (EPA) was chosen as the venue for this study, not only because data was available for each survey year, but also because longitudinal BPTWFG data was available at the regional level. The EPA has divided the United States and its territories into ten regions. Each of the regions has a regional administrator who reports to the Office of the Administrator, Gina McCarthy, and is charged with administering policy and programs as passed by Congress and defined by the EPA national office within its regional boundaries.

The Office of the Administrator has thirteen other offices, as well as ten regional administrators under its purview for a total of twenty-three direct reports as shown in Figure 1. As these offices have the same overall governing regulations and structure, this serves as a means of controlling for variation based on agency-level factors. Agency-level factors include economic (budget expansion, budget cuts), political (positive or negative response to agency initiatives from political figures), regulatory (Congressional and Presidential influence on agency activities), and media/public (media reports, public response to reports). Given that agency-level factors remain constant, what is different about these ten regional offices are geographic differences, demographic differences, and most importantly, the management of each office and the actions of that management in relation to work motivation efforts.

The years 2013 and 2014 showed declines in BPTWFG scores for all regions and the EPA as a whole. In early 2013, prior to the 2013 FEVS, the EPA was impacted by sequestration. In this instance, EPA employees were required to take 56 hours of unpaid leave over a period of four to

six months (EPA Employee 3, personal communication, 11/03/2015). According to EPA Employee 3,

"I think one of the frustrations were, people don't understand the budgetary process and the same time when we're sending out messages with regards what was going to happen here, there were other agencies within ... area who pretty much business as usual. We're subject to all the draconian things that I think we were going through. I think another thing that happened is that this was closely managed by headquarters and I think there wasn't the transparency in terms of communication about what was going to have as quickly as I think maybe we would have like. I think in that void people, I think, began to create their own rumors, so to speak. Put their own spin on things. I think we lost a little bit of credibility with some of our folks because they thought we were hiding information from them and in reality - We didn't have the information to give them (personal communication, 11/03/2015).

Similarly, in another region, EPA Employee 5 stated that,

"people see ... the sequestration didn't impact every agency the same. Some agencies didn't have any furloughs. When your friend is getting his full paycheck and not having these issues, and you're sitting there going, "Why is EPA having this issue? What does your agency do that my agency's not?" People may not understand how different agencies are funded and restrictions on funding and things like that. They just see that it's not an equal playing field across the government." (personal communication, 11/04/2015)

According to the interviewees of this study, the unpaid leave negatively impacted employee motivation prior to the 2013 FEVS. Later in 2013, the federal government shut down for a period of sixteen days in October. During this shutdown, the interviewees reported that their regions were essentially shutdown, with only the regional administrator, deputy regional administrator, and assistant regional administrator remaining in each office, and employees were concerned about going unpaid for those days. EPA Employee 2 noted that,

"We were in this very difficult position of the regional administrator and I were here in this building through the shutdown because we're a tenant and you can't have all of this regulatory stuff coming in the doors and sitting in the lobby or being returned to sender. We were expecting some very expensive staffing equipment that had to be safeguarded. All of the stuff that comes in FedEx every day that's federal regulatory nature, it can't just go back to sender. We became the defacto mail room clerks and plant waterers and other things that just kept some of the ludicrously simple things going because we didn't know how long it would be" (personal communication, 10/30/2015).

As EPA Employee 5 stated in relation to the government shutdown, "This one's certainly one that everybody understood that it was out of our control, but there was a lot of resentment even from staff to managers and stuff like that. It was just bad. It was very bad" (11/04/2015). The interviewees for this study all mentioned that they expected the furloughs and shutdown in 2013 had impacted the 2013 and 2014 FEVS scores.

Figure 1, EPA Agency Organizational Chart, shows where the regional administrators are found within the organization and the reporting structure under the EPA Administrator. The first tier, the executive tier, includes the EPA Administrator and Deputy Administrator. The second tier includes the regional administrators, as well as the assistant administrators, associate administrator, general counsel, inspector general, and chief financial officer for the EPA. The regional administrators, like their colleagues on the second tier, report directly to the EPA Administrator and Deputy Administrator. The regional administrators each lead one of ten distinct regions throughout the United States. One of the region's organizational charts is depicted in Figure 2.

This study will determine whether work motivation initiatives have been taken by middle managers in the EPA and if those interventions have been consequential to work motivation.

Table I³ lists all ten EPA regions and their respective BPTWFG scores. A regional average and EPA agency average score were added to provide additional insight into how scores vary between regions and within the EPA itself. The BPTWFG scores vary both within each region over time, and between regions. For example, in Region D, the 2010 score of 73.4 was both higher than the regional average score of 73.0 and the EPA agency score of 68.8. By 2015,

³ Regions 1-10 were alphabetized randomly using a random letter generator to maintain interviewee confidentiality, as requested by interviewees. Please see the Methods section for more details on the randomization.

although the regional average score had dropped to 62.9 and the EPA agency score had dropped to 58.5, Region D fell below both of them with a score of 55.3, a nearly 20 point drop within five years' time. Additionally, Region D's scores changed from close to the overall regional average to second from the bottom. It is by reviewing these scores that this study initially hypothesized that regional administrators, as middle managers, by and through their actions, could and did impact work motivation within their region. Please see TABLE I: EPA REGIONAL OFFICES AND BEST PLACES TO WORK IN THE FEDERAL GOVERNMENT INDEX SCORES for the list of regional offices within the EPA and their BPTWFG index scores for the years 2010-2015. A larger discussion of three of these regions, their respective middle management interventions, and their BPTWFG scores will be found in the case study chapter, CHAPTER V.

General Counsel

Assistant Administrator for Air and Radiation

Assistant Administrator for Enforcement and Compliance Assurance

Chief Financial Officer

Assistant Administrator for Administration and Resource Management

Assistant Administrator for Prevention, Pesticides, and Toxic Substances

Inspector General

Assistant Administrator for International Affairs

Associate Administrator for Policy, Economics, and Innovation

Assistant Administrator for Water

Assistant Administrator for Solid Waste and Emergency Response

Assistant Administrator for Research and Development

Assistant Administrator for Environmental Information

Regional Administrators (Regions A-J)

Figure 1.

EPA Agency Organizational Chart

Deputy Administrator

EPA Administrator

TABLE I

EPA REGIONAL OFFICES AND BEST PLACES TO WORK IN THE FEDERAL

GOVERNMENT INDEX SCORES

	2010	2011	2012	2013	2014	2015
Region A	73.7	77.9	76.8	70.5	64.2	71.2
Region B	65.3	63.5	66.1	63.5	60.4	65.5
Region C	72.9	73.2	74.9	68.5	67.3	60.2
Region D	73.4	71.9	68.6	63.4	61.8	55.3
Region E	75.6	73.1	69.3	55.2	44.9	46.3
Region F	69.8	69.6	72.0	64.6	67.8	71.8
Region G	78.3	75.8	75.2	66.5	60.3	56.2
Region H	72.7	73.3	72.5	65.0	61.0	64.8
Region I	69.7	69.2	68.1	59.3	56.9	66.0
Region J	78.8	77.8	78.2	71.2	66.9	71.4
Regional Average	73.0	72.5	72.2	64.8	61.2	62.9
Environmental Protection						
Agency	68.8	67.9	67.6	59.3	56.7	58.5

19

III. CONCEPTUAL FRAMEWORK AND RELATED LITERATURE

The broader purpose of this study is to understand the importance of those assigned to what are defined as middle management positions relative to those at either the top (executive) or bottom (supervisory) of the management hierarchy. This study will investigate the question of the relative importance of middle managers in a specific context – the federal government – and with regard to a specific organizational phenomenon – employee work motivation. The federal government is an interesting context for this study in both the size of the organization as a whole, and that it is in the public sector. In terms of its size, the federal government had over two million public sector employees in civilian, non-postal positions, with 12.6% of those employees in management or supervisory positions as of September 2013 (Office of Personnel Management, n.d.4). This translates into roughly 260,000 federal managers and supervisors overseeing the work of over 1.8 million public sector employees within the civilian, non-postal workforce.

This chapter reviews key findings from the middle management literature, and includes a discussion of where the subjects of the current study, the EPA's regional administrators, fit within EPA's organizational structure. The concepts of employee satisfaction, organizational commitment, and work motivation are discussed as is the relative influence of managers at different organizational levels on employee work motivation.

A. Middle Management in the Literature

To fully understand how the term "middle management" as used within the context of this study, a definition of middle management is necessary. Likert (1961) described middle managers as a linking pin, that position which is superior to one group, but subordinate to another. These linking pins, known as middle managers, serve as both coordinators and operators of the

activities at their level (Likert, 1961). Uyterhoeven (1972) and Fenton-O'Creevy (1998) agree, stating that middle managers are managers who are found above the front-line supervisors but below the top-level management. Other scholars agreed with this definition, noting that middle managers are, "all those below the top level strategic management and above first-line supervision" (Dopson & Stewart, 1990, p. 40). Floyd and Wooldridge (1992) find that middle managers have behaviors focused upwardly (to their executive level managers) and downwardly (to their subordinates), while middle managers also have cognitive roles of integrative and divergent (p. 154). The behavior and cognitive actions form, "a typology of middle management involvement in strategy," that can be used to view middle management actions within an organization (Floyd & Wooldridge, 1992, p. 154). This study will use the definitions provided by Uyterhoeven, Fenton-O'Creevy, and Floyd and Wooldridge for middle managers.

Uyterhoeven (1972) notes that in larger, divisional organizations, a manager of that division is needed, and that the division itself may have several layers of management. Each of these layers of management, according to Uyterhoeven, are middle management. In terms of job duties, Uyterhoeven finds that middle managers at all levels are managing relationships – with those above them (the executive level), those below them (the supervisory level), and with those middle managers who are considered his/her peers in the larger organization itself. What is particular about middle managers, as noted by Uyterhoeven, is that middle managers, "must rely on the support, cooperation, or approval of a large number of people" to complete their responsibilities as a middle manager (1972, p. 76). Uyterhoeven's study found that there may be layers of middle management, that is, middle managers who are not at the executive level of the organization, but who may have subordinates that are also considered middle managers in the organization. The layers of middle management may compete for resources or access to upper

levels of management, including higher levels of middle management and the executive level (Uyterhoeven, 1972). In managing the multiple relationships that middle managers juggle, Uyterhoeven notes that there are four tasks that middle managers must do, including, identify key relationships in the organization; identify the expectations for each role of subordinate, equal, and superior; juggle those three roles often simultaneously while acknowledging that trade-offs may be made; and communicate to superiors, peers, and subordinates that his/her middle management role requires managing multiple relationships within the organization at any one time. This role has been identified by other scholars as one of a, "brokerage role," meaning that the middle managers are the controllers of information to the executive level, to peer middle managers, and to the supervisory level, and this brokerage role can be different depending on the level with which the middle manager is sharing information (Shi, Markoczy, & Dess, 2009).

In a study of how middle managers implement strategy, Floyd and Wooldridge (1992) found that middle managers roles fall into one of four categories. These categories include upward and divergent, upward and integrative, downward and divergent, and downward and integrative (Floyd & Wooldridge, 1992). In an upward and divergent role, middle managers will, "champion alternatives" to the executive level regarding strategic options (Floyd & Wooldridge, p. 154). When in an upward and integrative role, middle managers will act to share information with the executive level by "synthesizing information" by evaluating and interpreting information to impact the executive level's perceptions of strategic initiatives (Floyd & Wooldridge, p. 155). In a downward and integrative role, middle managers encourage innovation by subordinates by, "facilitating adaptability" in the organization by shielding subordinate, "activities from top management while they [middle managers] garner excess resources and relax regulations to help emergent approaches get underway" (Floyd & Wooldridge, p. 155). Finally, middle managers in

a downward and integrative role, act to, "implement deliberative strategy" from the executive level within the organization (Floyd & Wooldridge, p. 155). In this instance, middle managers implement the strategy developed by the executive level. In a study of middle managers as innovators, Kanter (1981) found that innovation and action by middle managers to impact the work environment must include three main components: "information, resources, and support" (p. 98). Kanter finds that while middle managers may have some of the three components, the organizations which had the most success with middle manager innovation were ones that supported the achievement through internal organizational structure and culture. The structure and culture of the organization should include a team-building environment, participatory decision making, persuasion, recognition and rewards, and communication (Kanter, 1981). Each component of the organizational structure contributes to development of the three components necessary for innovation (Kanter).

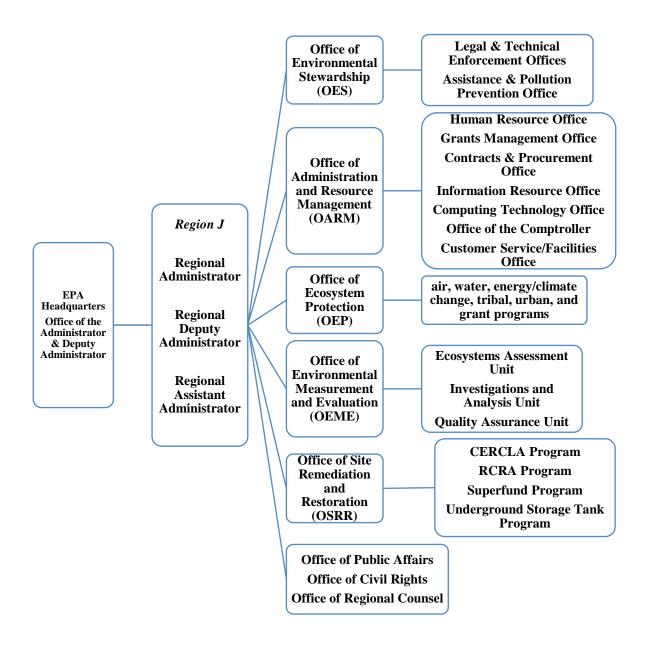
1. Public administration literature and middle managers.

The public administration literature on middle managers has had a varied focus. Among the topics covered are, middle management support of supervisors (Knies & Leisink, 2014), decentralized managerial authority (Wynen, Verhoest, & Rübecksen, 2014), leadership development of middle managers (McGurk, 2009), how middle managers react to organizational change (Giauque, 2015), and succession management (Lynn, 2001). Unlike the private sector literature, where considerable effort has been spent on defining middle management as a level of management, public sector research has focused on the activities of middle managers. This study, with its focus on how middle managers' initiatives influence work motivation, fits within that focus.

2. EPA's organizational structure within the literature.

Based on the literature, regional administrators are defined here as middle managers. Consistent the definition provided by Balogun and Johnson, (2004), the regional administrators each represent the larger organization in a particular geographic area. They further fall below the EPA administrator and above the front-line supervisors in the hierarchy (Uyterhoeven, 1972; Dopson & Stewart, 1990; Fenton-O'Creevy, 1998) and serve as links between the executive and supervisory levels of the EPA (Likert, 1961). The regional organizational chart presented in Figure 2 illustrates the placement of regional administrators within the hierarchy. Figure 1, provided earlier in the study, noted how regional administrators were below the EPA administrator, but equal to a number of other positions, such as the assistant and associate administrators identified in Figure 1, which Uyterhoeven found to be consistent with middle managers' placement in organizations. The regional administrator in Figure 2 is a linking pin between the upper management [EPA Administrator], and the layers of middle management below them within the region, as noted by Likert. In Figure 2, Region J is used as an example, showing the regional administrator's place between the EPA administrator and the managers below. Please see Figure 2, Regional Organizational Chart for a visual depiction of the levels of management both within the region and above the region.

Figure 2. Regional Organizational Chart



B. Definitions of Employee Satisfaction and Organizational Commitment

The constructs of employee satisfaction and organizational commitment have been considered both separately and jointly in the literature although they are more commonly considered separately. While scholars have differed in their view of the constructs of employee satisfaction, organizational commitment, and work motivation, this study focuses on the broader construct of work motivation. This section will review some of the differences discussed by scholars and how each construct has been defined.

In the PPS' index used for this study, the constructs are combined as an index score intended to measure employee satisfaction and work commitment in one measure. While there are scholars who support a combined construct (March & Simon, 1958; Marsh & Mannari, 1977; Williams & Hazer, 1986; Hulin, 1991; Wright, 2001; Harrison, Newman & Roth, 2006; Moynihan & Pandey, 2007), other scholars have developed methods to specifically measure employee satisfaction or organizational commitment individually. These scholars, such as Taylor and Bowers (1974) and Mowday, Steers, and Porter (1979), among others, have developed validated survey instruments to measure employee satisfaction or organizational commitment, respectively. This study accepts PPS' BPTWFG index score as a combined construct, with the knowledge while some scholars have supported a combined construct; other scholars continue to maintain separate constructs.

Employee satisfaction, as defined by Locke (1969, p. 1300), is the, "pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values." This is a personal response based on an employee's fit and achievement within his/her organization. Dormann & Zapf (2001) found that job satisfaction can also be seen as a deeply personal ideology, based in individual dispositions found within the employee. Within the

literature on employee job satisfaction are two examples of survey questions relating to employee satisfaction. Tsui, Egan, and O'Reilly (1992) assessed job satisfaction through the use of the question, "Considering everything, how satisfied are you with your current job situation" (p. 16). Cook, Hepworth, Wall, and Warr (1981), assessed satisfaction with the organization based on the employees' response to the question: "All in all, how satisfied are you with this organization, compared to most?" (p. 10). Each of these questions was designed to capture a person's satisfaction with his/her particular job and organization.

Organizational commitment is seen as the commitment of an individual to their organization.

It is defined as the:

"relative strength of an individual's identification with, and involvement in, a particular organization. Conceptually, it can be characterized by at least three factors: (a) a strong belief in, and acceptance of, the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization' (Porter, Steers, Mowday & Boulian 1974, p. 604).

This concept is captured in Mowday et al's (1979) question relating to organizational commitment, "I talk up this organization to my friends as a great organization to work for" (p. 47). Angle and Perry (1981) attempted to refine Porter et al.'s (1974) definition of organizational commitment by stating that organizational commitment could be split into two factors which combine to make up organizational commitment: "value commitment" and "commitment to stay" (Angle & Perry, p. 4). "Value commitment" was related to an employee's "commitment to support the goals of the organization," while the "commitment to stay" component of Angle and Perry's construct determined an employee's willingness to remain in an organization (p. 4).

C. Work Motivation and PPS' BPTWFG Index Score

The PPS' BPTWFG index score takes the concepts of employee satisfaction and organizational commitment and combines them into a single construct. This combined construct

is supported by the literature (March & Simon, 1958; Williams & Hazer, 1986; Meyer & Allen, 1991; Hulin. 1991; Harrison et al. 2006), and has been defined by Moynihan and Pandey (2007) as, "work motivation." A combined construct of work motivation acknowledges that employee satisfaction and organizational commitment are linked. In the development of the BPTWFG score, two of the questions from the FEVS score are; 1) "considering everything, how satisfied are you with your job" and, 2) "considering everything, how satisfied are you with your organization" (Best Places to Work, n.d.1). The FEVS question used by PPS as the third question of the combined index score is: "I recommend my organization as a good place to work." This question has roots in the definitions of organizational commitment provided by Porter et al (1974), Mowday et al (1979), and Angle and Perry (1981). This particular FEVS question fits within the organizational commitment literature, as recommending an organization as a good place to work could be construed as an acceptance of the organization's values and goals, and, in general, recommending a workplace could signify a commitment to the organization as a whole.

Upon review of the combined employee satisfaction and organizational commitment literature, authors such as March and Simon (1958), Marsh and Mannari (1977), Williams and Hazer (1986), Hulin (1991), Wright (2001), and Harrison et al (2006) have noted how employee satisfaction and organizational commitment can be seen as related constructs. March and Simon found that job satisfaction can impact an employee's decision to be absent, tardy or leave a job, while leaving a job is often considered a lack of organizational commitment. Williams and Hazer found that job satisfaction should be considered a contributing factor to organizational commitment and noted that it is a "strong and important relation" (p. 229). Noting that job satisfaction and what Meyer and Allen (1991) termed 'affective commitment' are conceptually the same, with the only differences in definition being 'job' or 'organization,' Hulin found that

these concepts should be considered together. Harrison et al. even went so far as to suggest that job satisfaction and organizational commitment should be considered together in a combined construct known as "job attitude" which would better define a construct which impacts an employee's performance, turnover, absenteeism and tardiness. Finally, Moynihan and Pandey (2007) find that employee satisfaction and organizational commitment, along with job involvement, should be combined into the construct of work motivation. Moynihan and Pandey argue that there is overlap in the employee satisfaction and organizational commitment literature, and as such, the concept of work motivation better defines how both organization and employee work together to impact work motivation in an organization. It is this concept of work motivation that is used within this study.

D. Executive Interventions, Supervisory Interventions, and Middle Management Interventions

This section includes a review of the literature on interventions which have been shown to impact work motivation. These interventions can be assigned to any of three levels of management: executive, middle, and supervisory levels. The executive level refers to interventions which are developed and/or implemented by the top-level management for the benefit of the organization as a whole, such as agency heads. A middle management level intervention refers to those interventions which are developed and implemented by middle managers to impact work motivation for employees of a specific area, region or location. Finally, supervisory level interventions are those interventions developed and implemented by front-line or first-level supervisors to impact work motivation within their work group. The purpose of this research is to investigate whether and to what extent middle management interventions have been shown to impact work motivation. To fully develop this question, this study explored each

level of management to determine what the literature states on how each level impacts work motivation.

1. Executive interventions: work motivation.

For the purposes of this paper, 'executive interventions' are considered to be those interventions which impact work motivation for employees of the organization as a whole and those which have been developed at the executive level of the organization. Scandura and Lankau (1997) found that the presence of flexible work hours impacted the satisfaction of women within organizations. For those with family responsibilities, flexible work hours, "related to higher organizational commitment and job satisfaction" (Scandura & Lankau, 1997, p. 377). Executive actions such as restructuring the organizational environment can impact employee satisfaction (Howard & Frink, 1996). Restructuring the organizational environment can include changes in reporting structure, the physical layout of workspaces, changes in actual office location (such as relocation or closure), and changes in work groups, among others. Wright and Davis (2003) found that, "job characteristics and the work context represent factors external to the employee and [are], therefore, more easily influenced by the organization ... to shape employee job satisfaction" (p. 72). Job characteristics include those that make the work meaningful to employees and impact their job, personal and educational growth, while work context relates to an organization's level of formalization, mission, values and employee reward systems (Wright & Davis, 2003). Job satisfaction has also been explored in relation to work benefits, either basic or related to career-enrichment. A study of human resource managers in Denmark found that organizations could impact employee satisfaction by focusing on career and bonus programs, increased pay, structured leadership, and "feedback incorporation" (Eskildsen

& Nüssler, 2000). Wright and Davis (2003) found that training programs and career development in conjunction with "formative feedback to employees" positively impact job satisfaction (p. 72).

The organizational commitment literature highlights ways in which organizations can positively impact organizational commitment through human resource policies and practices. Balfour and Wechsler (1996) find that, "commitment is bolstered or diminished as a result of organizational policies and practices" such as supervision, participation in decision making, and the opportunity for advancement (p. 272). Saltzstein, Ting, and Saltzstein (2001) added to the research by noting that, "no single policy or limited set of policies is likely to make much of a difference to employees" with different family demands (p. 463). In other words, employers should seek the broadest range of policies to meet the vast and varied demands of the workforce. In these instances, executive interventions including flexible work schedules, basic benefits, and career-enriching benefits have been shown to impact both employee satisfaction and organizational commitment. However, Saltzstein et al.'s finding that no one single policy or set of policies will meet all employees' needs highlights the difficulty of assessing which or what particular executive intervention(s) have the greatest impact on employee satisfaction and organizational commitment. For example, employees with family commitments may appreciate a flexible work schedule which can address both personal needs and work needs, while employees with a long commute may want the opportunity to work at home. Organizations may be unable to provide programs which address both of these needs and as such, it may be difficult to determine which program would benefit both the organization and employees (Kinnie, Hutchinson, Purcell, Rayton & Swart, 2005). Blau, Merriman, Tatum, and Rudmann (2001) found that while basic benefits impacted turnover and organizational withdrawal intent, careerenrichment benefits had a strong relationship with affective organizational commitment. In other

words, by focusing on career-enrichment benefit packages, such as those impacting employee skill enhancement or employability, employers may see a rise in organizational commitment by employees.

Another organizational aspect that impacts work motivation is the organizational learning culture. Organizational learning culture can include such features as the ability to attend conferences, interact with peers, and engage in learning is impacted directly by management's interest and willingness to adopt learning practices for employee development. Garvin (1993) defines organizational learning culture as, "an organization skilled at creating, acquiring, and transferring knowledge and insights" (p. 80). Joo and Park (2009) found that organizational learning culture is a predictor of career satisfaction, organizational commitment, and turnover intention. This culture, while often implemented at the middle-management and supervisor-level, has its roots at the executive level.

2. Supervisor interventions: work motivation.

The literature suggests that management has an effect on work motivation but much of the focus has been on supervisory interventions rather than middle management interventions.

Employees appreciate the opportunity to work with quality managers and effective supervision has a positive effect on organizational commitment based on the research of Balfour and Wechsler (1996), Howard and Frink (1996), Ting (1997), Fernandez (2008), and Joo and Park (2009). Leadership and supervision have been the subject of a number of studies on employee satisfaction and commitment (Bateman & Strasser, 1984; Glisson & Durick, 1988; Kim, 2002; Madlock, 2008; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Bateman & Strasser (1984) found that leadership behaviors can impact both employee satisfaction and organizational commitment. By leadership behaviors, Bateman & Strasser specifically refer to leaders' reward

and punishment behaviors, noting that the, "receipt of rewards and/or punishment from one's organizational superior" could affect employee commitment. Madlock (2008) noted that effective supervisor communication can be found to impact "subordinate job satisfaction" as well as "subordinate communication satisfaction" (p. 61). Constructive formative feedback from supervisors was also found to have an impact on employee satisfaction (Wright & Davis, 2003). Finally, Nyhan (1999) found that trust in supervisors had a significant impact on affective commitment, a, "strong bond between an individual and the employing organization" (p. 59) as defined by Porter et al (1974). This strong bond relates to how employers can provide a supportive working environment for employees (Meyer et al, 2002).

Opportunity for advancement within the organization has been noted as having a positive impact on organizational commitment. This positive impact was reported by Balfour and Wechsler (1996) and Moynihan and Pandey (2007), but with mixed results by Ting (1997). Ting found that federal employees at higher levels (GS-7 or above) were impacted by advancement opportunities while those at lower levels (GS-6 and below) were not (1997, p. 324). Kim (2002) found that there is a positive relationship between participative management and employee satisfaction, while Moynihan and Pandey found that group culture had a positive effect on both job satisfaction and organizational commitment. Moynihan and Pandey define group culture as a work environment that promotes a sense of esprit de corps, shared commitment to the organization and a sense of common values is a definition of group culture which positively impacts job satisfaction and organizational commitment. This work environment could also include an emphasis on employee learning. Management that supports employee learning, whether it be development of skills or career development, has been shown to positively impact employee satisfaction (Wright & Davis, 2003).

3. Middle management interventions: work motivation.

The literature on how middle managers' actions impact work motivation is limited. Fenton-O'Creevy (1998) explored how middle managers can impact employee involvement efforts developed at the executive level and found that if middle managers resisted employee involvement efforts, satisfaction among employees participating in employee involvement efforts was lower. He found that middle managers may resist employee involvement efforts when they perceive a threat to their power or position, through delayering or job loss (Fenton-O'Creevy, 1998). Glisson & Durick (1988) and Currivan (1999) found that leader and supervisor support are significant predictors of both employee satisfaction and organizational commitment. In some cases, middle managers can serve as a block to efforts made by upper management to impact employee involvement programs, as noted by Fenton-O'Creevy (1998). Finally, information sharing with employees, an intervention which middle management can impact, has been found to be a determinant of both employee satisfaction and organizational commitment. Information flow from the executive level to the supervisory level is directly impacted by middle management and access to information allows for trust to be developed between an employee and the organization (Creed & Miles, 1996).

While these findings are critical to what we know about middle management interventions, they also are extremely limited as compared to interventions at the supervisor or executive levels. In TABLE II: EMPLOYEE SATISFACTION AND ORGANIZATIONAL COMMITMENT BY ORGANIZATION LEVEL, there is a visual depiction of the literature review, which shows a distinct shortage of middle-management literature on work motivation. While the literature finds that the executive level and supervisory level of management have a

variety of ways to impact work motivation of their employees, there is opportunity for work that specifically addresses how middle management interventions impact work motivation.

TABLE II

EMPLOYEE SATISFACTION AND ORGANIZATIONAL COMMITMENT BY

ORGANIZATION LEVEL

Org. Level	Impact on Employee Satisfaction and Organizational Commitment			
Executive	 Leadership (Glisson & Durick, 1988; Currivan, 1999; Eskildsen & Nüssler, 2000) Organizational Learning Culture (Garvin, 1993; Joo & Park, 2009) Work experiences (Balfour & Wechsler, 1996) Organizational policies, practices & programs (Howard & Frink, 1996; Balfour & Wechsler, 1996; Saltzstein, Ting & Saltzstein, 2001; 			
	 Kinnie, Hutchinson, Purcell, Rayton & Swart, 2005) Benefits (Eskildsen & Nüssler 2000; Blau, Merriman, Tatum & Rudmann, 2001, Wright & Davis, 2003) 			
Middle Management	 Information sharing (Creed & Miles, 1996; Fenton-O'Creevy, 1998; Shi, Markoczy, & Dess, 2009) Blocking leadership efforts (Fenton-O'Creevy, 1998) 			
Supervisory	 Leadership behaviors and support (Bateman & Strasser, 1984; Glisson & Durick, 1988; Currivan, 1999; Meyer et al, 2002; Wright & Davis, 2003) Effective supervision (Balfour & Wechsler, 1996; Howard & Frink, 1996; Ting, 1997; Fernandez, 2008) Trust (Nyhan, 1999) Opportunity for advancement (Balfour & Wechsler, 1996; Moynihan & Pandey, 2007) 			
	 Communication and Participation (Balfour & Wechsler, 1996; Wright & Davis, 2003; Madlock, 2008) 			

IV. METHODS

For this research, a case study design was chosen to answer the questions of whether and how middle management interventions impact employee work motivation. In this section there is a discussion of how Yin's (2009) approach to case study design shaped the development of the design, and how research by George and Bennett (2005) and Blatter and Haverland (2012) further refined how the research was conducted.

A. Case Study Development

As Yin (2009) notes, case studies are well suited for addressing "how" and "why" research questions and the research questions in this study relate to how and why middle management interventions impact work motivation (p. 4). The use of interviews of both staff and management personnel, a review of agency documents and policies related to work motivation interventions by middle management, and the analysis of changes in index scores will allow for a richly detailed analysis of the impact of middle management interventions on work motivation.

Yin (2009) identifies five components of a case study, "a study's questions; its propositions (if any); its unit(s) of analysis; the logic linking the data to the propositions; and the criteria for interpreting the findings" (p. 27). The research questions to be addressed in this study relate to whether middle management interventions have been used to impact work motivation, how they have been utilized, the role of middle managers in work motivation efforts, and how consequential middle management interventions related to work motivation of employees have been. These questions include:

- 1. What is the role of middle managers in a large organization?
- 2. Do middle managers act primarily to implement the directives of those at the executive level, or do they initiate their own initiatives?

- a. If it is the latter, what is the nature and extent of their impact?
- 3. How consequential are middle management interventions with regard to employee work motivation?

1. Unit of analysis, data.

The unit of analysis for this study are regional offices of the Environmental Protection Agency. The data for this study includes the BPTWFG index scores from 2010-2015, FEVS data from 2010-2015, interviews, and documents provided by the interviewees. The interview data was for this study was collected from PPS, OPM, and EPA employees.

This study will describe and discuss the actions of middle managers at the Environmental Protection Agency. Within the Environmental Protection Agency, there are ten regions which administer federal environmental laws in all fifty states and the U.S. territories. Each of these ten regions has a middle manager, known as a regional administrator, as its head. Floyd and Wooldridge (1999) posited that middle managers can serve as a means for geographically-disconnected upper management to serve a local area or region such as the EPA regions in this study. The geographically disconnected upper management is that of the EPA Administrator and the headquarters of the EPA while the local areas are the regions and the middle managers are the regional administrators.

The years of 2010-2015 represent both years where there is data available for each region, but also the years in which President Obama was appointing individuals to the regional administrator positions following his election in 2008. Eight of the ten current regional administrators were appointed in the years 2009 and 2010. As success (or failure) of middle management interventions may be related to the length of time the intervention has been in place,

the tenure of regional administrators was considered. As such, the focus was further narrowed to those regions which had regional administrators with a longer tenure.

Regional administrators, while the head of regional operations, do not govern alone in the regions. Each regional administrator has a deputy regional administrator as well as an assistant regional administrator. The deputy regional administrator and assistant regional administrator are not politically appointed, rather they are long-term EPA employees who have moved up the ranks of the organization. Initially, all ten regional administrators, their respective deputy regional administrators, and assistant regional administrators were identified as potential interviewees – thirty people in all. These thirty individuals were sent an invitation letter, a copy of the interview questions, and a copy of the informed consent via USPS certified mail. A copy of the invitation letter, interview questions, and informed consent can be found, respectively, in Appendices A, B, and C.

After each certified mail green card was returned via USPS, indicating that the potential interviewee had received his/her mailing, an email was sent to each potential interviewee who had not responded to the initial mailing requesting an interview with electronic copies of the invitation letter, interview questions, and informed consent attached. Although all ten regional administrators were asked to participate in this study, none were willing to be interviewed. A former regional administrator, as well as deputy regional administrators, assistant regional administrators, and a staff person were interviewed. In all, eight interviews were conducted via telephone or in-person. The interviewees have been identified as either "management" or "staff." For the purposes of this study, an interviewee identified as "management" refers to those individuals who have a management role (that of either former regional administrator, deputy regional administrator, or assistant regional administrator), while an interviewee designated as

"staff" does not hold a management role and is not either a former regional administrator, a deputy regional administrator, or assistant regional administrator. A list of the interviewees for this study can be found in TABLE III: LIST OF INTERVIEWEES AND REGION on page 42 of this study.

As all interviewees requested anonymity, the ten regions have been recoded using a random string generator found at www.random.com. As these letter values were randomly generated, with no repeat values, the random string generator developed a list of ten letters which were assigned to the each of the ten regions. From this, the regions were then alphabetized, resulting in a randomization of the regions. Interviewees identified in TABLE IV have been assigned to their respective randomized region, and identified as either "management" or "staff," to ensure that the anonymity requested would be preserved. As such, regions 1-10 have now been renamed as randomized regions A-J, and interviewees are known as EPA Employee 1-8. The letter values for the regions developed using this randomization method have been used throughout this study. In this study, data from Regions A, I, and D will be presented as a means of assessing the impact of the middle management interventions employed in those regions, in CHAPTER V.

During each interview, interviewees were asked to discuss work motivation efforts within their respective regions and to provide background material (when available) to corroborate their interview statements. The documents shared were given under the following conditions: that the interviewee who shared the document remain anonymous and that the documents could not be shared in their entirety, word-for-word. As such conditions were a requirement for the receipt of the documents, the documents will be referred to generically, without attribution to region.

After reviewing the BPTWFG index scores and the score variation of the BPTWFG index scores, the issue of how many EPA employees per region versus how many EPA employees per

region responded to the FEVS was considered. It was possible that the number of employees taking the FEVS year-to-year and staffing levels in the regions could have changed over time, thus also impacting the BPTWFG index scores. From this information, a table with the staffing levels for each region was created, the number of employees in each region responding to the FEVS, and then the percentage of employees who participated in the FEVS per year was calculated by dividing the number of employees taking the FEVS by the total number of employees per region. To obtain this data, a Freedom of Information Act request with both the EPA and OPM was filed. Please note that the percentage of employees responding to the survey dropped for all regions in 2013 and 2014 in part due to the new sampling technique instituted by OPM for the FEVS.

Looking at the data, the regions were split in 2014 with six of the ten regions responding with a higher response rate and four of the ten regions responding with a lower response rate as compared to 2013. Of those regions which responded with a higher response rate in 2014 than in 2013, three of the six had both a lower number of FEVS surveys returned and a lower total number of employees in the region. In the remaining three regions with a higher response rate in 2014, the number of FEVS surveys returned was higher than in 2013 but the total number of employees in each of the regions was lower. The EPA provided staffing levels from 2003 – 2014, while OPM provided FEVS response information from 2010-2015. The data in the table represent the overlapping data available, 2010-2014, which is five years of the six year time span of which this study covers (2010-2015). Please see TABLE IV, REGIONAL OFFICE WORKFORCE LEVELS AND FEVS RESPONSE FY10-FY14 for each region's workforce levels, number of employees responding to FEVS, and the percentage of regional employees responding to the FEVS for the years 2010-2014.

TABLE III
LIST OF INTERVIEWEES AND REGION

	Interviewee	Region
1	Management	Agency
2	Management	G
3	Management	A
4	Management	A
5	Management	D
6	Management	J
7	Staff	A
8	Management	I

TABLE IV

REGIONAL OFFICE WORKFORCE LEVELS AND FEVS RESPONSE FY10-FY14

Regional Office Workforce Levels & FEVS Response FY10 - FY14					
	FY10	FY11	FY12	FY13	FY14
Region A - FEVS	456	444	521	285	215
Region A - Workforce Level	936	952	917	855	772
Region A - Response Rate %		46.64%	56.82%	33.33%	27.85%
Region B - FEVS	467	491	634	238	196
Region B - Workforce Level	1062	1069	1033	967	937
Region B - Response Rate %	43.97%	45.93%	61.37%	24.61%	20.92%
Region C - FEVS	387	442	417	219	210
Region C - Workforce Level	635	604	577	553	508
Region C - Response Rate %	60.94%	73.18%	72.27%	39.60%	41.34%
Region D - FEVS	478	517	472	217	239
Region D - Workforce Level	905	907	889	849	816
Region D - Response Rate %	52.82%	57.00%	53.09%	25.56%	29.29%
Region E - FEVS	461	377	394	310	263
Region E - Workforce Level	642	644	615	580	544
Region E - Response Rate %	50.94%	41.57%	44.32%	36.51%	32.23%
Region F - FEVS	334	323	385	189	147
Region F - Workforce Level	571	584	563	528	462
Region F - Response Rate %	58.49%	55.31%	68.38%	35.80%	31.82%
Region G - FEVS	412	408	432	201	205
Region G - Workforce Level	872	862	829	781	738
Region G - Response Rate %	47.25%	47.33%	52.11%	25.74%	27.78%
Region H - FEVS	397	452	424	159	147
Region H - Workforce Level	873	881	833	806	741
Region H - Response Rate %	45.48%	51.31%	50.90%	19.73%	19.84%
Region I - FEVS	553	623	598	219	241
Region I - Workforce Level	1266	1247	1221	1165	1092
Region I - Response Rate %	43.68%	49.96%	48.98%	18.80%	22.07%
Region J - FEVS	252	286	304	139	135
Region J - Workforce Level	667	671	652	612	567
Region J - Response Rate %	37.78%	42.62%	46.63%	22.71%	23.81%
Regional Average FEVS	420	436	458	218	200
Regional Average Workforce Level	843	842	813	770	718
Regional Average Response Rate %	49.01%	51.08%	55.49%	28.24%	27.69%
KEY					
Workforce Level = # of Staff in Region		Workforce Level Data from EPA FOIA Request 10/2014			
FEVS = Federal Employee Viewpoint Survey Partici	FEVS Data from OPM FOIA Request 12/2015				
Response Rate % = FEVS/Workforce Level	Chart is Author's Own Creation				

2. Criteria for interpretation.

For this research, information was gathered about middle management interventions designed to impact work motivation through the use of interviews and a review of agency records provided by interviewees. In order to ensure a richly-detailed case study as defined by Yin (2009), documents and interviews were utilized to assess potential linkages between middle management interventions and work motivation at the regional level as evidenced by BPTWFG index scores. Regional-level EPA personnel were interviewed at their respective offices or via telephone interviews and asked detailed questions about work motivation efforts by middle management. Documents and agency materials which referenced work motivation efforts by the agency and region were also reviewed. The data was coded with codes as listed in Table VI, CODE DEFINITIONS. Coded data was then compared to the BPTWFG index scores to ascertain if any change (positive or negative) happened following the implementation of the middle management intervention. A full discussion of this comparison will be detailed in VI. FINDINGS.

B. Mixed-Methods Approach

This study utilized BPTWFG index scores, interviews, and documents for a mixed methods approach to assessing the impact of middle management actions. The research began by interviewing a high-ranking EPA executive-level employee with regional office experience. Following that interview, regional office personnel at five of the ten regional EPA offices were interviewed and data on policies and programs related to work motivation at each chosen region was collected. The interviews were transcribed and the notes from the interviews were typed. Following this, the interviews and documents were coded in Atlas.ti. Following data analysis and

coding, details about the middle management interventions and their timeframes were used to determine if the interventions had an impact on the region's scores.

This study follows Maxwell's (2008) model to combat threats to validity such as by use of rich data, triangulation, comparison, validation of respondents, search for negative cases, use of quasi-statistics, and long-term field involvement. This model was followed by collecting background materials referenced in the interviews, development of verbatim transcripts from the interviews, interviewer notes from the time of and directly after each interview, emails shared by interviewees, and documents shared by interviewees. Other data was collected by Freedom of Information Act requests to the EPA and OPM. The EPA provided information on its organizational structure, number of employees in each region from 2003- 2014, contact information for regional administrators, 'trend reports' for FEVS data for regions, and subagency reports. OPM provided information on the FEVS' scores for the EPA from 2010-2015, with de-identified data coded for each region and for the other non-regional components of the EPA. A telephone interview was conducted with the PPS on the mechanics of the BPTWFG index including how it is developed, how agencies are categorized, and how PPS shares the data with federal agencies.

Triangulation of the data was accomplished by, "collecting information from a diverse range of individuals and settings, using a variety of methods," including internet searches for data, Freedom of Information Act requests, interviews and transcripts, and shared data from interviewees (Maxwell, 2008, p.112). Comparisons were done by looking at Regions A and I, compared to the control group of Region D – please see CHAPTER V, CASE STUDY OF THREE REGIONS for more details on these regions. Each respondent was asked a series of open-ended questions about middle management initiatives in relation to work motivation in

their respective region. When a particular initiative was mentioned, follow-up questions about when the initiative was developed, how it was developed, and what funding, if any, was devoted to the initiative were asked by the interviewer. For example, if an interviewee mentioned "mentoring" as a middle management initiative, questions were asked about the targets for mentoring (who was targeted as mentors/mentees), type of programming (e.g. formal or informal), time commitments (e.g. daily, weekly, monthly), length of mentoring (time in months), expected outcomes (e.g. training, development, onboarding), and how the initiative was developed (by the regional administrator or at the EPA executive level). In this example, such questions allowed for a comparison of mentoring programs from region to region and allowed the interviewer to ask follow up questions referring to the initiative by asking the respondent to confirm the information collected about the initiative.

The use of quasi-statistics can be seen in the figures included in CHAPTER V, CASE STUDY OF THREE REGIONS. In each region's subchapter, two figures are presented. One figure details the changes in BPTWFG score over time, as compared to the EPA totals and regional average, with middle management initiatives indicated with arrows and information boxes within the timeline. The second figure in each region's subchapter depicts the percentage change over time of BPTWFG scores for the region, the EPA total, and regional average. To develop the intense, long-term involvement described by Maxwell (2008), this study included emails from the interviewer to the interviewees to clarify interview information, collecting additional triangulation data from interviewees, and interviewing personnel from five of the ten regions to allow for a detailed look at not only middle management interventions, but executive interventions which provided rich detail to the case study.

In order to develop the rich data recommended by Maxwell (2008) as essential to validity, regional EPA personnel, including a former regional administrator, two deputy regional administrators, assistant regional administrators, and a staff member were interviewed. Each interviewee was asked about work motivation efforts in their respective region. Interviewees were asked to indicate if their respective regional administrator was actively engaged in reviewing FEVS scores and BPTWFG index scores relating to work motivation and were pursuing initiatives designed to positively impact work motivation in their region.

George and Bennett (2005) recommend the identification of the research study's variables so as to focus the research strategy and that variables should be, "of theoretical interest for purposes of explanation (p. 69). The idea behind their statement is that with a theoretically interesting study, research variables must be neither too narrow, nor too broad. In this case study, middle management interventions are the independent variable. While 'interventions' may be broad in nature, by further defining them as 'middle management' the focus of the study narrows to a more manageable scope. In terms of the dependent variable, the BPTWFG index scores are used. These scores were developed by PPS for each region based on the answers to three FEVS responses. TABLE V, VARIABLES & CASE SELECTION lists the independent and dependent variables related to this study. This study hypothesized that middle management interventions have an impact on BPTWFG index scores at the regional level. As such, the independent variable is Middle Management Interventions, the dependent variable is the Best Places to Work Index Score. Table V includes regions A, I, and D which will be discussed in CHAPTER V: CASE STUDY OF THREE REGIONS.

TABLE V

VARIABLES & CASE SELECTION

 $Modelled\ after\ Blatter\ and\ Haverland\ (2012,\ p.\ 57)$

Variable	Case	Region X	Region Y
Independent Variable	Middle Management Interventions	Yes	No
Dependent Variable	Change in Best Places to Work in the Federal Government (BPTWFG) Score	Positive Change	No Change

1. Case selection.

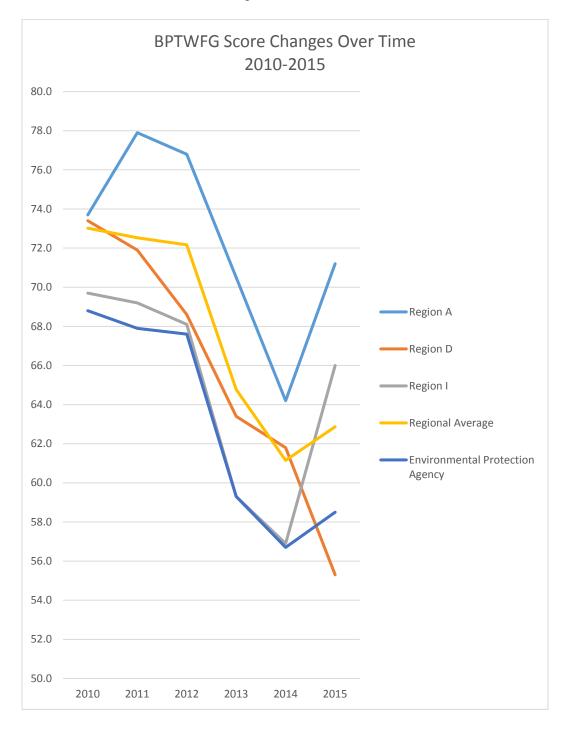
George and Bennett (2005) note that "controlled comparison" is a method of case selection which identifies cases which are, "comparable in all respects except for the independent variable, whose variance may account for the cases having different outcomes on the dependent variable" (p. 81). This case selection method is also championed by Blatter and Haverland (2012) in their co-variational analysis method. In the case of the EPA, the regions share a common mission, values, core operational requirements, and or executive leadership but differ in regional administrators and geography and as such, a most-similar case selection process would be appropriate in this case study. In this study, it is possible that geography of the regions may make a difference. An example of a difference in geography impacting regional office operations is a more urban, heavily industrialized region versus a more rural, agricultural region. While these differences are acknowledged, they were not accounted for within the context of this study.

In the interviews, answers to the research questions were sought as well as alternative explanations for variation in BPTWFG scores, a method supported by Maxwell (2008) and Blatter and Haverland (2012). These potential alternative explanations are discussed in CHAPTER VIII: CONCLUSIONS. Please note the focus years for this study are 2010-2015, as the 2009 regional administrator appointments would have been made no more than four months in advance of the FEVS of 2009, thus minimizing the possibility and/or impact of any middle management interventions by the 2009 appointees for the 2009 FEVS results. Figure 3, Regions A, I, & D, shows the change in each region's score over time in comparison to their fellow regions. Please note that the variation in scores between regions is demonstrably large, with the highest regional score at 77.9 (Region A in 2011) to the lowest regional score of 55.3 (Region D in 2015), a range of 22.6 points. This study hypothesizes that the variation in scores is driven by

the degree of middle management/regional administrator involvement in efforts to impact employee work motivation.

Using the model demonstrated by Blatter and Haverland (2012) in the method of difference in co-variational analysis, the independent variable and dependent variable are identified in TABLE V, VARIABLES & CASE SELECTION, and regions A, I, and D have been identified as regions of interest, to be discussed in CHAPTER V: CASE STUDY OF THREE REGIONS. The method of difference in co-variational analysis approximates, "the conditions of an experiment" in research (Blatter & Haverland, 2012, p. 37). In this study, the presence of middle management interventions is hypothesized to positively impact the BPTWFG index scores, while the absence of middle management interventions is hypothesized to have no impact the BPTWFG index scores. Regions in this study meet Blatter and Haverland's (2012) criteria in that two of the regions chosen for discussion in CHAPTER V have four and six middle management interventions, while one other region has two middle management interventions, with one discontinued prior to the 2015 FEVS survey.

Figure 3
Regions A, I, & D



2. Data collection & interviews.

For this study to meet the criteria set out by Maxwell (2008) to address validity issues, and for the study to be informative, the full participation and cooperation of the EPA (as an agency) and its regions, was necessary. Data collected included information on executive-level interventions related to work motivation as well as on interventions by the regional administrator related to work motivation. There were thirty-one documents received in total. The documents included internal emails to staff, requests for feedback, discussion of FEVS reports and work environment; communications on work-life and wellness programming, training materials, a diversity newsletter, an FEVS action plan and survey results, FEVS reports, and a labor-management study report. These documents were received from the interviewees and will be referenced generally within CHAPTER V: CASE STUDY OF THREE REGIONS, CHAPTER VI: FINDINGS, and CHAPTER VIII: CONCLUSIONS. A comprehensive list of the documents discussed in this chapter and other chapters, as well as a general description of the contents of the documents, can be found in Appendix E, List of Documents Received.

Interviews with regional staff were conducted onsite at the region as well as via the telephone. In all, eight interviews with both management and staff level personnel at five regions were conducted, totaling more than eleven hours of transcribed interviews. A list of interviewees and their region can be found in TABLE III, LIST OF INTERVIEWEES AND REGION.

3. Coding data.

After interviews were completed and all documents were received, a transcript of each recorded interview was made and notes from each interview were developed. All documents, notes, and transcripts were coded using Atlas.ti software. In all forty-seven documents, transcripts, and notes were coded. As interventions were identified by the interviewees or

documents, they were coded as such with codes created for executive-level, supervisory-level, and middle management-level interventions. Other codes were created to identify if FEVS or PPS scores were discussed in the context of the development of middle management interventions. Each segment of text was likely to have multiple codes, indicating an overlap of interventions or multiple reasons for the intervention. For example, if the intervention was initiated at the middle management level, involved communication efforts, was the result of a FEVS score indicating poor communication in the region, and the intervention was related to communication about training, the intervention would have been coded as a "middle management intervention," "communication," "FEVS," and "training."

The coding protocol was based on what Miles, Huberman, & Saldaña (2014) refer to as "causation coding" (p. 79). Causation coding, according to Miles et al (2014) is, "appropriate for evaluating the efficacy of a particular program" (p. 79). In this case, the programs were the interventions taken by regional administrators to impact employee work motivation. Using this form of coding will help to understand how particular middle management interventions impacted the BPTWFG scores for each of the chosen regions. Further, this type of coding will allow the identification of which interventions and/or what combination of interventions had an impact. A visual depiction of this coding process is as follows: FEVS SCORES > MIDDLE MANAGEMENT INTERVENTION (COMMUNICATION) > TRAINING, modeled after Miles et al (p. 79). In TABLE VI, a list of codes and their definitions can be found on page 55.

Following the selection of cases and a review of agency documents related to work motivation and interviews, middle management interventions implemented in the regions were identified. The middle management interventions found during the research included: Awards, Rewards, and Recognition; Communication; Recruitment; Team-Building; Training and

Development; and Work Environment. The executive-level interventions found during the research included: Alternative Work Schedules; Awards, Rewards, and Recognition; Diversity Programs; FEVS Working Group; Mentoring; Telework; and Training and Development. Additional, non-middle management intervention codes were also developed. These include Big Picture: Furloughs; Big Picture: Lessons Learned from Government Shutdown; EPA Agency; FEVS; PPS; and Supervisory Level. Explanations for each of these codes can be found in TABLE VI, CODE DEFINITIONS.

TABLE VI

CODE DEFINITIONS

Code	Definition
Alternative Work Schedules	Employees may work a schedule other than eight hours a day,
	five days per week. Alternatives in a two week pay period
	include a five day week, then four day week, at nine hours per
	day; a four day week of ten hours per day for each week of the
	pay period.
Awards, Rewards, and	Regional awards for performance, performance appraisals,
Recognition	alternate work assignments.
Big Picture: Furloughs	Background information given by interviewees related to
	employee furloughs agency-wide
Big Picture: Lessons	Background information given by interviewees relating to how
Learned from Government	the government shutdown of 2012 provided learning
Shutdown	opportunities for EPA management and staff.
Communication	E-mail, memos, meetings
Diversity Programs	Special emphasis programs designed to improve diversity in the
	Region. These include African-American, Hispanic, LGBTQ,
	Disabled, Asian-American, Older Feds, and others.
EPA Agency	Those interventions developed and implemented at the agency-
	wide level
FEVS	Any mention of FEVS
Mentoring	Interventions designed to help mentor new employees,
	supervisors, managers.
Middle Management	Those interventions developed and implemented at the middle
Intervention (MMI)	management level
PPS	Any mention of PPS data, including BPTWFG index scores
Recruitment	Interventions designed to impact recruitment in the Region to fill needed skill sets.
Supervisory Level	Those interventions developed and/or implemented at the
-	supervisory level
Team-Building	Interventions designed to cross units, departments, and
	divisions to develop work teams to address issues.
Telework	Employees may work from home or alternate location one to
	two days per week.
Training and Development	Interventions designed to promote training and development of
-	regional staff. These may include in-house, as well as outside, training.
Work Environment.	Interventions on work environment include office redesign,
	work-life balance, and office furniture.

V. CASE STUDY OF THREE REGIONS

A. Introduction

In this chapter, the results of the investigation of middle management interventions to impact employee work motivation in three regions, Region A, Region I, and Region D, will be presented. All activities, whether they be at the executive or middle management level, designed to impact work motivation will be referred to as "interventions." In this chapter, Regions A and I both have initiated middle management interventions, as well as passed through or modified executive interventions, while Region D initiated one middle management intervention and modified executive level interventions during the study years of 2010-2015. "Initiated" middle management interventions refers to those middle management interventions which were implemented without an executive-led intervention as a guide. For example, in Region A, the regional administrator created a FEVS workgroup within the region designed address regional needs identified by the FEVS scores. A pass-through intervention is one that is created by the executive level but implemented by middle management without modification. One pass-through executive intervention mentioned by a number of interviewees was the development of a frontline supervisors working group. The working group was developed at the executive-level and was implemented at the regional level by regional administrators identifying front-line supervisors to participate in the agency-level working group. A modified executive intervention is one that is developed at the executive level but implemented at the middle management level with region-specific modifications to the intervention. For example, although many regions simply passed-through the front-line supervisors group executive intervention as directed, one region modified this executive intervention. In Region A, the regional administrator developed a

region-specific front-line supervisors group was appointed to address the region's front-line supervisor issues, in addition to appointing front-line supervisors to the national group.

Information about middle management interventions were gathered through interviews with regional personnel and documents provided by regional personnel. Data from BPTWFG scores and percentage changes of BPTWFG scores over time are used to illustrate how middle management initiated interventions, and executive modified interventions may have impacted BPTWFG index scores. All interventions, both middle management and executive level, mentioned in this chapter were enacted between the years 2010 and 2015. Although other interventions were mentioned in the interviews, any instituted before 2010 were not included in this study. Finally, regions in this study were chosen using the controlled comparison method advocated by George and Bennett (2005) and Blatter and Haverland (2012), as a means to compare cases which are similar in every way apart from the independent variable. The independent variable in this case is the regional administrator's interventions, meaning those interventions which were initiated at the middle management level.

B. Region A

An employee of Region A stated that the middle management initiatives created in Region A stem from a, "...commitment ...from a regional administrator ... to listen to the results [of FEVS] ... and really respond" (EPA Employee 7, personal communication, 12/11/2015,). When asked about FEVS scores and their region, EPA Employee 3 stated that, "we look at the results every year and look at the trends over the course of time and see where we're improving, where we're the same, and where we've gone down" (personal communication, 11/03/2015). EPA Employee 3, as well as EPA Employee 7, both noted that the regional administrator in Region A is particularly interested in ways the region can improve work motivation of the region's

employees (personal communication, 11/03/2015; personal communication, 12/11/2015). This focus on FEVS scores regionally has led to development of both middle management initiatives as well as modification of executive-led interventions.

1. Initiated middle management interventions.

When speaking of middle management initiatives, EPA Employee 3 noted that after comparing the region's results over time, new initiatives such as work groups have been developed to address particular issues in the region and to present recommendations to management. In Region A, a workgroup, comprised of over sixty regional employees, focuses on regional FEVS results, including how to address the issues identified by the results (EPA Employee 3, personal communication, 11/03/2015). Within the working group, staff and supervisors work side-by-side to solve regional-level issues related to FEVS results and EPA Employee 4 reports that the ability to take on leadership roles as staff members has motivated the working group as a whole (personal communication, 11/03/2015).

Another regional initiative initiated in the years 2010-2015 is the concept of fifteen-minute increments for each hour. This initiative allows employees to arrive and depart from work in fifteen-minute increments rather than just on the half-hour or hour (EPA Employee 3, personal communication, 11/03/2015). For regional employees, this initiative allowed for greater flexibility in arrival times, from half-hour increments to quarter-hour increments. EPA Employee 3 reports that this initiative has been a success with both employees (who now have greater flexibility in mass transit and commutes in general) and supervisors (who no longer have to police arrivals and departures between the half-hour and hour increments) (personal communication, 11/03/2015).

2. Modified and pass-through executive interventions by middle management.

In Region A, some actions relating to employee work motivation involved the modification of executive-level interventions. One of these interventions is the Greenspark Initiative. The idea behind the Greenspark Initiative is to provide better health and wellness benefits to all agency employees. Although this intervention was initiated at the executive level, Region A received permission to implement a regional intervention to complement the Greenspark Initiative. This intervention included surveys of regional employees on ideas for health and wellness activities to be considered within the region, a work-life-focused staff assignment, and general work environment interventions, such as the addition of stability balls or standing desks (EPA Employee 7, personal communication, 12/11/2015).

Another executive-led intervention that has a middle manager component is a front-line supervisors' advisory group. EPA Employee 3 noted that FEVS scores were the source of information about how front-line supervisors face enormous burdens and pressures in their jobs and are in need of internal support (personal communication, 11/03/2015). Regions were asked to create a front-line supervisors group as well to nominate a member of their staff to serve on an agency-wide front-line supervisors' advisory group (EPA Employee 3, personal communication, 11/03/2015). Members of the agency-level group will test any new software system to be implemented agency-wide to ensure a smooth roll-out (EPA Employee 3, personal communication, 11/03/2015). At the regional level, the front line supervisors' group will identify and solve issues that front line supervisors face in their jobs.

Executive interventions, such as telework are often started at the executive-level but are implemented at the middle management level. Telework is an example of a modified, executive-level intervention. While telework has been present in the region and agency for at least twelve

years, according to EPA Employee 4, a recent event in Region A's host city encouraged a greater push for employees to enter into telework agreements than in previous years (personal communication, 11/03/2015). In Region A, 99% of employees have a telework agreement in place for a minimum of 'episodic' telework (EPA Employee 4, personal communication, 11/03/2015). A telework agreement that is 'episodic' is not regularly scheduled on a weekly or monthly basis but is utilized only when needed such as when employees need time to read a report or need to concentrate without interruption (EPA Employee 4, personal communication, 11/03/2015). In the case of Region A, an event happened locally which interrupted regularly scheduled mass transit and traffic near its office. As such, each employee was asked to file an episodic telework agreement with the region to allow for the employee to work from home during this event and in the future (EPA Employee 4, personal communication, 11/03/2015). All of Region A's employees save three now have an episodic telework agreement on file. Those three employees who did not wish to have a telework agreement were required to come to the office during the event days to do their work as the region could not, "force them" to telework (EPA Employee 4, personal communication, 11/03/2015). EPA Employee 4 also reports that there is a high percentage of employees that have a regularly-scheduled telework agreement, meaning they may telework one to two days each week, every week, or may telework once a month or more (personal communication, 11/03/2015).

A final intervention that was executively-led but implemented by middle management was an employee retirement buyout program developed in December 2013 (EPA Employee 4, personal communication, 11/03/2015). In Region A, this intervention was a modified executive-level intervention. In the case of the EPA, an agreement was reached with OPM regarding early retirement buyouts for EPA employees. The agreement included the fact that the buyouts must

be revenue neutral, in other words, the buyout payment to each employee for agreeing to early retirement could not exceed his/her remaining salary for the year of retirement. The regional administrator modified this executive intervention by determining which employees would be impacted by the buy-out program. In Region A, employees at levels GS-13 to GS-15 were targeted for early retirement buyouts because, "we had a lot of administrative staff, we were also looking to get people with different skill sets" (EPA Employee 4, personal communication, 11/03/2015). In all, sixty employees in Region A agreed to an early retirement buyout and left by April 1, 2014 (EPA Employee 4, personal communication, 11/03/2015). By implementing the buyouts at the targeted levels, Region A was able to free up salary funds for hiring new employees for the region, leading to a middle management intervention for onboarding new employees. The onboarding intervention included ensuring that new employees had the equipment and supplies needed at their desk when they arrived. Also, the previously mentioned FEVS workgroup initiated a mentoring/buddy system for new employees to pair them with more experienced employees (EPA Employee 4, personal communication, 11/03/2015).

Region A has also introduced a mentoring program in 2013, an example of a modified executive intervention. The Region A mentoring program was initially directed only at administrative support staff but was later expanded to include the entire region (EPA Employee 3, personal communication, 11/03/2015). The mentor-mentee partnership included training, events, and social activities. The first mentoring program had five mentoring pairs and a one-year timeline which ended with a graduation ceremony for the mentees (EPA Employee 3, personal communication, 11/03/2015). After this mentoring program was finished, feedback was sought from those participating in the program. From this feedback, the mentoring program was expanded to include all regional employees with seventy pairs of participants. This second round

of mentoring has now concluded and a third round is planned. An offshoot of this mentoring program has been a special managerial-level mentoring program, now just six months old. This program pairs managers with executive level staff (EPA Employee 3, personal communication, 11/03/2015). This executive-level intervention was modified at the regional level to meet the needs of Region A.

In Figure 4, a graph is presented which represents the BPTWFG index scores of Region A as compared to the regional and EPA agency averages for the years 2010-2015. The graph shows that Region A has been consistently above both the regional and EPA agency average in each year from 2010-2015, but has followed the same downward trend as both the regional average and the EPA in the years 2012-2014. From 2014-2015, however, Region A's index scores rose faster than the EPA agency and regional averages. Middle management interventions, as well as pass-through and modified executive interventions have been included in this graph to show timelines for implementation.

Figure 5, Region A Percent Change in BPTWFG Scores, 2010-2015, shows the percentage change over time for Region A, as compared to the regional and EPA agency percentage changes over time. In this graph, please note that while Region A's percentage change over time not as drastic a fall as the regional and EPA agency percentage changes for the 2012-2013 years, Region A did not improve as drastically as the regional and EPA agency percentage changes did in 2013-2014. While Region A, the regional average, and the agency average all increased from the 2013-2014 to 2014-2015 timeframe, Region A had a much greater percentage change over time than either the regional or agency averages.

Figure 4

Region A BPTWFG Score Changes Over Time

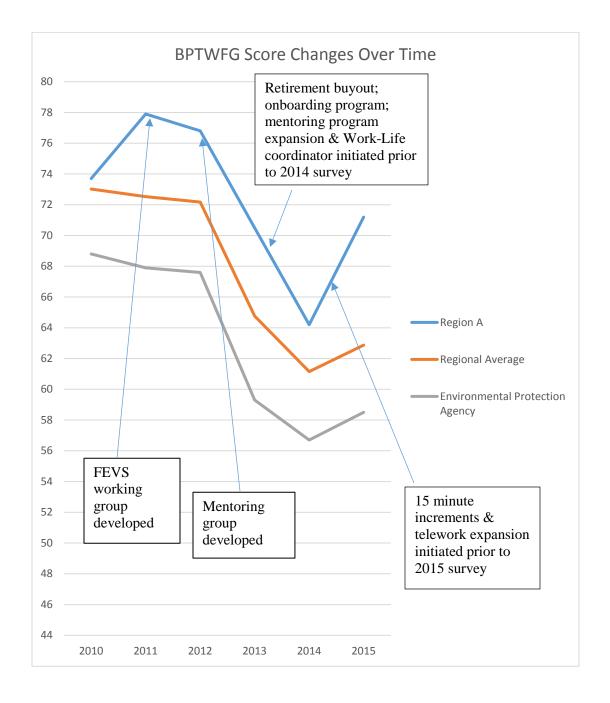
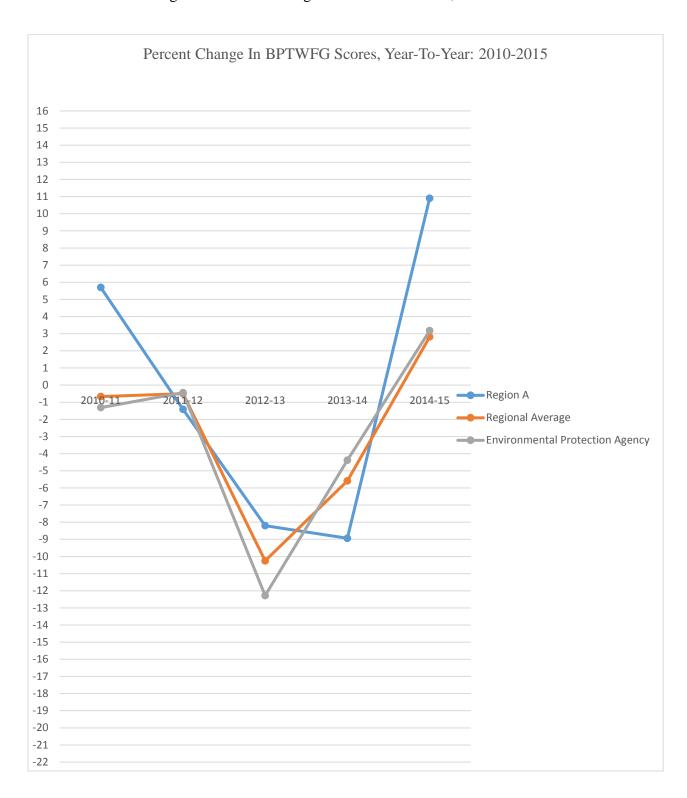


Figure 5

Region A Percent Change in BPTWFG Scores, 2010-2015



C. Region I

Region I is of particular interest because of its lack of middle management interventions until the results of the 2013 FEVS were received. Following the 2013 results, the regional administrator developed discussions on what the results meant to the region (EPA Employee 8, personal communication, 01/12/2016). EPA Employee 8 stated that,

"We started saying we can do some things with this [the results]. It doesn't have to be perfect, and it doesn't have to be exact, and you don't have to buy into it 100%, and you can still critique the instrument itself, but at the end of the day this data can be used to tell us are there things we should be doing that make sense regardless simply to make our workplace better" (personal communication, 01/12/2016, brackets mine).

Prior to 2013, there had been some internal turmoil about how the results should be used, and how the questions were worded (EPA Employee 8, personal communication, 01/12/2016). Ultimately, "one of the things we realized is it's not a bad thing to remind people and make it clear that if we're doing something in part we're trying to be responsive in EVS" (EPA Employee 8, personal communication, 01/12/2016). Region I's initiatives began following the return of the 2013 results, in fall 2013.

1. Initiated middle management interventions.

In Region I, a concerted effort was made following the 2013 results to link middle management interventions to FEVS results. EPA Employee 8 stated that interventions are now often prefaced with, "by the way we heard through the EVS that people are dissatisfied with this, and this is one of the things we're trying to do" (personal communication, 01/12/2016). Equally as important, though, was ensuring that employees understood that interventions were not introduced only because of FEVS results, "Not because we're simply trying to increase the EVS score, but we're trying to respond to the essential issue" (EPA Employee 8, personal communication, 01/12/2016). Region I understood that the FEVS was only a symptom of the

issues within the region but in order to treat the issue at hand, the symptoms must be addressed through action. When asked about an explanation for the dramatic increase in BPTWFG scores from 2013 – 2015, EPA Employee 8 stated, "I think what impacted us most in the last EVS year was a lot of the stuff that we had already had planned" (personal communication, 01/12/2016). Those planned items included interventions in communication and employee development.

Communication was an issue within Region I, which was reflected in their FEVS scores. EPA Employee 8 noted that the regional administrator,

"...talked about our accomplishments from the year beforeand... mentioned EVS in terms of the question about communication from senior leaders and understanding where things fit. I personally believe that had an impact, because it was such a new thing" (EPA Employee 8, personal communication, 01/12/2016).

This middle management-initiated communication effort was region-wide in impact. In some cases, performance standards for managers were updated to include a requirement for quarterly branch meetings and monthly section meetings (EPA Employee 8, personal communication, 01/12/2016). This effort stemmed from low FEVS results concerning communication from managers and supervisors to employees within the region.

As part of the middle management-initiated communication efforts, a suggestion box, proactive communication on topical issues, a regional webpage, and an employee newsletter were implemented in the region as well. The suggestion box, first implemented in February 2015, was offered as a way for employees to anonymously offer suggestions or ask questions about what is happening in the region. Regional leadership will answer the questions received publicly unless the questioner wants the answer anonymously (EPA Employee 8, personal communication, 01/12/2016). Although the suggestion box was first implemented to garner suggestions for the region, EPA Employee 8 notes that nearly, "70% of them end up being questions" (personal communication, 01/12/2016). Further, the region has been actively

communicating on topical and current issues which may be of interest to employees even when all the answers to the issues may not be fully developed. For instance, following the furloughs and sequestration of recent years' past, a new budget often brings some anxiety to employees as to whether or not the agency will be fully funded for the year and whether furloughs or sequestration are imminent. As such, EPA Employee 8 noted that the region was,

"Trying to figure out what impacted our last EVS score... Everybody knows that Congress passed an omnibus bill. The agency is still trying to figure out all the detail in the operation, all that kind of stuff ... we crafted something that was a very simple message that basically assured people, probably the most important thing on their mind is it looks like we're going to have enough money to cover payroll. There's not going to be any furloughs or anything like that. The agency is looking at how to fund priorities, and we'll share more details as we get them" (personal communication, 01/12/2016).

This serves as an example of how Region I is trying to specifically address communication issues within the region related to the anxiety about the agency budget as a whole. The regional webpage was revised based on a model used in another region. The idea was to create a space to highlight new hires to Region I as well as any career moves within the agency and to share information with employees about activities region-wide (EPA Employee 8, personal communication, 01/12/2016).

The employee newsletter was designed to answer questions from the suggestion box or to address questions related to the FEVS. For example, a recent newsletter answered questions related to, "what's the difference between a detail and a permanent job and a lateral reassignment ...what is veteran's preference and how does that work" (EPA Employee 8, personal communication, 01/12/2016. The idea behind the newsletter is that by answering questions from employees, misperceptions can be alleviated – and that may reflect in the FEVS over time.

In late 2012, Region I participated in a study regarding relationships between employees and supervisors and how these relationships could be strengthened over time. This study is

referred to in Appendix D, item 25, "Labor-Management Study." Some of the findings included communication, transparency in the promotion process, career development for employees, training for behavioral issues in the workplace, and to promote teamwork between employees and supervisors in the workplace. The idea behind this study was to discover how Region I could improve its labor-management relations and perhaps develop interventions or activities designed to promote better labor-management relations. This study was the impetus for many of the related middle management interventions.

Development of employees was also a focus of the regional administrator in Region I. As part of a series of recommendations developed by the regional FEVS team (more on the team in 2. Modified and pass-through executive interventions by middle management), employees expressed an interest in finding ways to move within the region for a trial period of between ninety and one hundred twenty days. By using a job board, employees would be able to express interest in learning another job for a trial period, and the board would serve as a means to pair employees for a job trade. EPA Employee 8 states that the regional FEVS team,

"... proposed the idea of a job board that would allow people, [with] no guarantees, ... the structure to go online and express interest. Supervisors could look at it if they're considering posting something. Employees could look at it if they're wanting to find somebody to partner with or maybe to talk to about the job" (personal communication, 01/12/2016, brackets mine).

After negotiations with the union and the development of the job board template, the board was rolled out in late 2015. While this job board idea (and reaction to it) is likely not reflected in the 2015 results (as it had not gone online as of the 2015 FEVS), it will be interesting to see if this idea has an impact on work motivation for employees region-wide in future year's FEVS.

2. Modified and pass-through executive interventions by middle management.

An example of a pass-through executive intervention in Region I is the creation of action teams to address FEVS results. Each region was asked to create a regional-level FEVS team to look at the FEVS results and to brainstorm how to address the issues which were highlighted by the FEVS results. The teams, "consist of managers, staff, union representatives, representatives from our special emphasis program ... it's a real cross-section of folks" (EPA Employee 8, personal communication, 01/12/2016). As part of the intervention to use the FEVS results more effectively within the region, Region I implemented a regional FEVS team to provide recommendations to the regional administrator, deputy regional administrator, and assistant regional administrator (EPA Employee 8, personal communication, 01/12/2016). These recommendations included ideas about communication and development of employees, much the same as the middle management initiatives already underway by the region.

As part of the communication focus and related to FEVS results, the regional FEVS team conducted surveys to determine the feelings of employees on promotions and awards. One of the initial findings was that employees wanted to know more about quality step increases (QSIs) and how these are awarded. The regional FEVS team found that, "people don't understand that not everybody that gets an outstanding will get a QSI because OPM sets limits on QSIs ... in our region of almost 1100 people, we get a proportion of QSIs ... about 20" (EPA Employee 8, personal communication, 01/12/2016). Without communicating that QSIs were limited by OPM, false expectations about QSIs could have led to disappointment by those receiving 'outstanding' on their respective evaluations. By surveying employees about promotions and rewards specifically, the executive level intervention on FEVS results was modified to fit the needs of Region I.

Another modified executive-level intervention by the regional FEVS team was to ensure that mid-year and end-of-year performance appraisals were productive both for the person receiving it and the person conducting it. In this effort, there was a checklist developed for the employee receiving the evaluation – what to expect, how to prepare, and how to follow up, as well as a similar checklist for supervisors (EPA Employee 8, personal communication, 01/12/2016). As part of the development of the checklists, the employee union was consulted and the checklists have been in place since mid-year 2013, just after the 2013 FEVS (EPA Employee 8, personal communication, 01/12/2016). Other communication initiatives with the region have related to publicizing how to receive monetary rewards for employees and how to report harassment in the workplace. The ideas behind each of these communications were to increase feelings of "fairness" in awards and in the workplace in general. As EPA Employee 8 stated, "It's not a bad thing if the ah-ha moment is more communication will help. Because that's doable" (personal communication, 01/12/2016). In other words, communication has little monetary cost to Region I but could reap rewards in increased employee knowledge and potential motivation.

In Figure 6, Region I BPTWFG Scores Over Time, there are a few items that bear mentioning. First, Region I has traditionally been below the regional average each year, save in 2015. Additionally, Region I has tracked very closely to the agency average score at the EPA, with a large change in score between the years 2014-2015. In this one year's time, while the regional and agency averages also rose, the Region I score rose at a much faster pace. In this figure, the interventions listed above have been denoted, along with their year, to showcase what intervention happened in which year.

In Figure 7, Region I Percentage Change in BPTWFG Scores, 2010-2015, Region I is shown as tracking a lower percentage change each year than both the regional and agency changes until

2013-2014 and 2014-2015. In 2013-2014, Region I slightly pulls ahead of the regional and agency average percentage change for that year, while in 2014-2015, Region I's results are much more dramatic – a nearly 16% increase in score from 2014 to 2015, as compared to a 2.8% average change for the regions and a 3.2% change for the EPA as a whole. It is anticipated that the actions taken by Region I in the years since 2013 have made an impact on their BPTWFG scores, while the years prior to 2013 reflect the consequences of inaction by the regional administrator on the FEVS findings.

Figure 6

Region I BPTWFG Score Changes Over Time

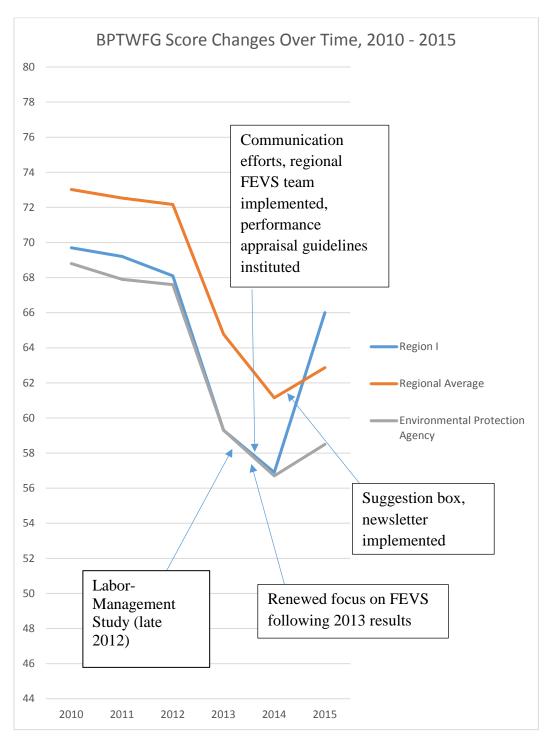
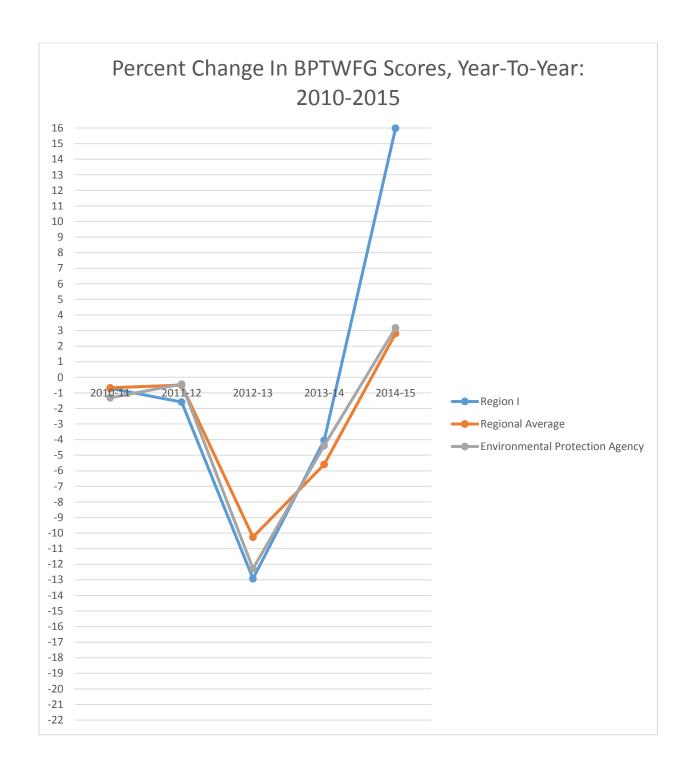


Figure 7

Region I Percent Change in BPTWFG Scores, 2010-2015



D. Region D

Region D, unlike Regions A or I, implemented very few middle management interventions, or passed-through or modified executive-level interventions during the time period covered by this study, 2010-2015. EPA Employee 5 describes it as follows,

"I will say that since the 2014 EVS scores, which EPA took the drop in terms of the best places to work, which is driven by the EVS, a lot more attention has been paid to motivational, employee engagement type issues. Before that I think a lot of it was really at what I'll call a "local level". It's the section chief working with their staff, the branch chief working with their section chiefs. It's trying to gain engagement of your staff, having them understand what the section's doing, what the branch is doing, and how that rolls up into the division's goals, and ultimately the region's goals and EPA's goals. I think a lot of that was done more at a lower level, at the lowest, first line supervisor/branch chief type level" (personal communication, 11/04/2015).

Prior to 2014, with the focus on the supervisory level management's impact on work motivation, little attention was paid to middle management-level interventions in Region D. Since 2014's FEVS results, EPA Employee 5 states that, "It's not more of a local level now, it's a broader scale. We're actually trying to engage across the region" (personal communication, 11/04/2015).

1. Initiated middle management interventions.

In Region D, there has been one initiated middle management intervention in the years 2010-2015. A former middle management initiative in Region D is the leadership development program. According to EPA Employee 5, for the past four years, there has been a leadership development program available to staff to prepare them to take a leadership role within Region D (personal communication, 11/04/2015). Each year, twenty to twenty-five staff members have signed up, although there was a decrease last year to just twenty employees. As such, this programming was dropped in 2015 to develop a management development program geared at teaching managers about how to manage employees (EPA Employee 5, personal communication, 11/04/2015). In this case, Region D found that "one of the lower scores in our EVS was training

and access to training. That's just one area where we've always provided it, but maybe it's not as well recognized by our staff' (EPA Employee 5, personal communication, 11/04/2015). The management development programming has not yet been developed or implemented.

2. Modified and pass-through executive interventions by middle management.

When speaking of executive level interventions, EPA Employee 5 notes,

"since the 2014 scores, I think that we've seen that it's become a higher profile issue. Certainly that was a wake-up call, I think, for many of our senior leaders in headquarters, and then that flowed down from them that we need to pay attention to these scores. We need to understand what's driving these scores. Certainly part of it is motivation, but there's so many other types of things that impact these scores" (personal communication, 11/04/2015).

Alternative work schedules and telework are both examples of executive-level interventions that are subject to middle management discretion. In terms of different challenges for supervisors versus employees, EPA Employee 5 acknowledges that supervisors frequently do not have the level of scheduling flexibility that their employees have (personal communication, 11/04/2015). As an example of a modified executive-level intervention, non-supervisory employees are allowed to utilize an alternative work schedule such as four ten hour days per week, or can telework from home. Supervisors in Region D may or may not be allowed these same privileges; it depends on the division director's discretion. Also, within the region, division directors and deputy division directors are not allowed to utilize the four, ten-hour day alternate work schedule (EPA Employee 5, personal communication, 11/04/2015). Telework is another example of an executive intervention over which the regional administrators have discretion. Telework is the ability to work from an alternate work location other than the office and requires trust on the part of both the supervisor (to believe the employee will work from an alternate location with the same commitment as at the office location) and on the part of the employee (to

work with the same commitment at the alternate location as at the office location). In the case of Region D, nearly 85% of its employees have a telework agreement according to EPA Employee 5 (personal communication, 11/04/2015). The reason for the discrepancy, according to EPA Employee 5, is that some managers in the region are, "resistant" to the concept of telework – those managers want their employees, "physically in sight" (personal communication, 11/04/2015). This resistance on the part of some managers may signal to employees that there is a lack of trust.

Another modified executive level intervention in Region D was the early retirement buy-outs in late 2013, early 2014. Region D had two rounds of early retirement buy-outs with thirty people in the first round and sixteen people in the second round (EPA Employee 5, personal communication, 11/04/2015). Originally, nearly two hundred positions were identified as potential buy-outs for the first round with seventy-five positions ultimately offered buy-outs. In the second round, there were fifty potential buy-outs with thirty positions of those fifty offered buy-outs. Percentage wise, forty-five percent of those employees who were offered early retirement buy-outs took them. There was some negative feedback as a consequence of the buy-outs, according to EPA Employee 5. The negatives were that the process was too quick, that the knowledge transfer did not happen, and that the work load did not decrease with people leaving – that those that remained at Region D were expected to keep up with the work that had been done by those that had taken the early retirement buy-outs (EPA Employee 5, personal communication, 11/04/2015).

In Figure 8, Region D BPTWFG Score Changes Over Time, Region D's scores have fallen each year since 2010. While both the regional average and EPA agency scores were relatively steady from 2010-2012, Region D's scores were already falling. Agency and regional scores

bottomed out in 2014, with a recovery in 2015, while Region D's scores continued to fall into 2015. In Figure 8, both initiated middle management interventions and modified or pass-through executive interventions were added to the chart to show the year of action. Only in 2010 and 2014 were Region D's scores higher (slightly) than the regional average, and higher than the EPA agency average. Between 2011 and 2013, Region D's scores fell between the regional and EPA agency scores, while in 2015, Region D's scores were lower than both the regional and EPA agency scores.

In Figure 9, Region D Percent Change in BPTWFG Scores, 2010-2015, Region D had mixed results. Between 2010 and 2012, Region D had a greater negative percentage change over time than both the regional average and EPA agency scores. Between 2013 and 2014, Region D fared slightly better, with a greater increase in percentage change over time than either the EPA average or the regional average. Between 2014 and 2015, much like the scores referenced in Figure 8, Region D fared poorly, falling to a greater negative percentage change over time than it had received before. Further, in this same time period, the regional average and EPA agency percentage change over time both went positive for the first time – a direct contrast to the percentage change direction of Region D.

Figure 8

Region D BPTWFG Score Changes Over Time

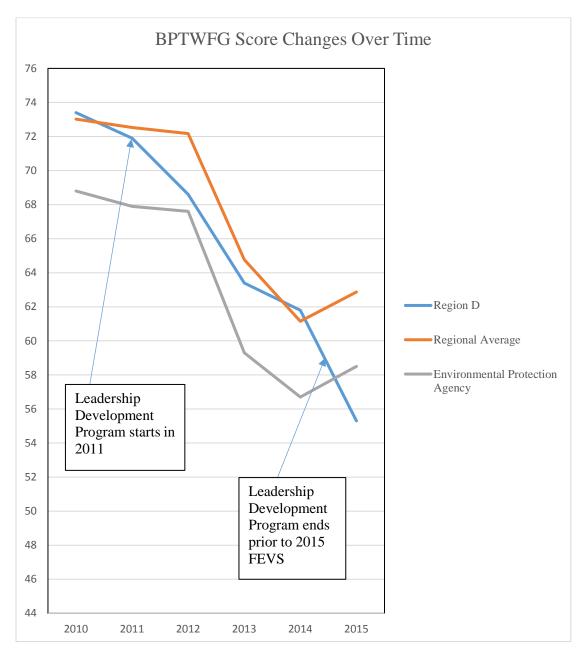


Figure 9

Region D Percent Change in BPTWFG Scores, 2010-2015



VI. FINDINGS

A. Introduction

In this chapter, descriptive information about the interviewees, information about the types of middle management interventions identified by interviewees, and answers to the three research questions will be shared. As confidentiality of the interviewees was requested, the interviewees have been previously identified in TABLE III only as either management or staff. While this description provides a basic view of the role of each of the interviewees, it does not give a full understanding of the depth and breadth of experience of the interviewees. A table of descriptive statistics and demographics is presented in TABLE VII, INTERVIEWEE DESCRIPTIVE STATISTICS.

The information about middle management interventions described by the interviewees will include the name of the intervention mentioned and type of intervention, such as those initiated by the middle manager; or those interventions which are a pass-through or modified intervention developed at the executive level and modified at the regional level. The purpose of showcasing this information is to assess the extent to which the regional administrators were consequential with regard to employee work motivation. The interventions will be catalogued in TABLE VIII, INTERVENTIONS and described in this section.

The research questions' answers will be provided not only from the three cases presented in CHAPTER V, but also from the other interviewees' responses in their respective interviews, to present a full view of the information received. Overall, the information gleaned from the interviewees as well as the documentation collected from all regions interviewed during this research study, provides a fuller view of the activities of middle managers in a large-scale organization.

B. Descriptive Information About Interviewees

In all, eight formal interviews were conducted with EPA employees, either in person or via telephone. The interviewees were men and women, management and staff, with experience within the EPA ranging from a little over five years to over thirty-five years. Interviewees held as few as two positions within the EPA to as many as seven ranging from initial staff positions to a number of management positions up to and including regional administrator. In TABLE VII, Interviewee Descriptive Statistics, a chart of descriptive demographics and statistics is presented. In TABLE VII, gender of the interviewees, years of experience, and positions identified by interviewees are cataloged to present a greater understanding of the depth and breadth of experience held by the interviewees. Please note that interviewees could have held more than one of the positions listed in TABLE VII as interviewees listed each position they had held since joining the EPA. What is particularly interesting about the interviewees is that they are all longterm EPA regional employees who have held multiple positions at the regional level with little to no experience in other federal agencies nor in state or local positions. This depth and breadth of experience of the interviewees provided this study a knowledgeable and in-depth review of both new and continuous middle management and executive interventions designed to impact work motivation.

TABLE VII

INTERVIEWEE DESCRIPTIVE STATISTICS

Gender	Percentage	Number
Male	63%	5
Female	37%	3

Years of Experience ⁴	Median	Mean	Mode
EPA	28	26.07	36
Regional EPA	28	25.77	35
Federal Agency, not EPA	3	1	0
State, Local	0	0	0

Positions identified by
Interviewees ⁵
Assistant Regional Administrator
Branch Chief
Deputy Division Director
Deputy Regional Administrator
Deputy Regional Counsel
Division Director
Engineer
Environmental Protection Specialist
Program Manager
Regional Administrator
Regional Comptroller
Regional Counsel
Scientist
Section Chief
Staff Attorney

⁴ Seven of the eight interviewees shared their years of experience. This statistic refers to just these seven interviewees. Gender and positional information reflect information gathered from all eight interviewees.

82

⁵ Positions are in alphabetical order, not in organizational-chart order.

C. Interventions

The interventions in this study were varied, with some interventions initiated at the middle management level, while others were developed at the executive level and either modified by the middle manager, or were passed-through without modification. Interventions initiated at the middle management level are those interventions developed and designed by regional administrators to meet the needs of their region without a directive from the executive level as to the design or development of the intervention. Those developed at the executive level fell into two categories: pass-through or modified. Pass-through interventions are those interventions developed and designed at the executive level and implemented as designed at the regional level with little or no adjustment by the region. The regional administrators, did not divert from, nor enhance the pass-through interventions to fit their region but enacted them as developed and designed by the executive level. Modified interventions are those which were developed and designed at the executive level, but were modified in some way by middle managers to better meet the needs of their organization. The regional administrators who modified interventions added their own enhancement to the intervention to meet the needs of their region.

In TABLE VIII, INTERVENTIONS, all interventions identified by the interviewees are listed in alphabetical order and categorized as either executive level "pass-through," executive level "modified," or middle management level "initiated." This chart illustrates the findings of all the regions interviewed in this study, not just the regions featured in CHAPTER V. The category for each intervention will be marked with the respective region where it was documented. What this table illustrates is the activity level of the regional administrators. While some regional administrators, such as Region A's regional administrator, have a large amount of activity, other regional administrators, such as Region D, have a small amount of activity.

TABLE VIII

INTERVENTIONS

Intervention	Executive	Executive	Middle
	Level	Level	Management
	Pass-	Modified	Level
	Through		Initiated
Alternative Work Schedules	Regions A,	Region D	
	G, I, J		
Awards, Rewards, Recognition	Regions A,		
	D, G, I, J		
Communication			Regions A, G, I, J
Diversity Programs	Regions D,	Regions A	
	G, I	& J	
FEVS Work Groups (Agency)		Regions D,	
		G, I, J	
FEVS Work Groups (Region) ⁶			Region A
Mentoring		Regions A,	
		D, G, I, J	
Recruitment			Regions G, J
Regional Working Groups			Regions A, G, I, J
Team-Building			Regions A, G, J
Telework	Regions A,	Region D	
	G, I, J		
Training and Development	Regions D,	Region A	
(Agency)	G, I, J		
Training and Development			Regions A, D, G, I,
$(Region)^7$			J
Work Environment ⁸			Regions A, G, J

-

⁶ In this instance, one particular region was proactive in initiating a FEVS working group prior to the executive-level intervention.

⁷ Some regions have specific training and development initiatives initiated by their regional administrators to address regionally-specific training needs.

⁸ This category includes changes to the physical working space, as well as initiatives designed to address issues which may impact the working environment for employees, such as work-life balance, childcare facilities, or physical fitness initiatives (standing desks, workout facilities)

D. Research Question 1: What is the role of middle managers in a large organization?

In the Environmental Protection Agency, regional administrators serve as the region's manager, report to the EPA Administrator, and have levels of management below them within the region they serve, a descriptor that fits within the literature on middle managers and their role (Floyd & Wooldridge, 1999). Floyd and Wooldridge (1999) found that the middle level of an organization is, "where the action is" because of middle management's unique and strategic placement within the organization between the executive level and the supervisory level (p. 124). For Balogun and Johnson (2004), middle managers in geographically disconnected areas may have an, "elevated role" due to decentralized power structure and location (p. 523). This study finds that regional administrators, as middle managers, have elevated the role of the middle manager to include development of interventions, as well as modification of executive-level interventions.

In terms of the role of regional administrators, EPA Employee 1 stated that regional administrators are able to control the region's culture, communication, participation of the region in decision making, and the translation of policies into practices within the region (personal communication, 10/01/2015). This study's findings are in agreement with EPA Employee 1's assessment – that middle managers have three main roles in the organization. Middle managers serve as the cultural and communications touchstone for the organization, they directly impact how much the organization below them participates in decision making, and they serve as translator for executive-level and middle-management level policies into practice for their organization.

1. Middle managers are cultural and communications touchstones.

Floyd and Wooldridge (1992) identified four roles of middle managers in the development of strategy – one of those roles was to communicate to upper management about how executivelevel policies were implemented at the middle management level. This study finds that middle managers also implement their own interventions and can modify executive-level interventions to fit their particular region, an expansion of Floyd and Wooldridge's findings. Interviewees mentioned open-door policies, all-employee regional meetings, and newsletters as means by which their regional administrators worked to impact culture and communication (EPA Employee 6, personal communication, 11/05/2015; EPA Employee 2, personal communication, 10/30/2015; EPA Employee 8, personal communication, 01/12/2016). In terms of the open-door access, EPA Employee 6 made a point to mention that employees in their region know that they have a regional administrator, "who wants to hear from them and it makes a huge difference" in terms of employee satisfaction and work motivation (personal communication, 11/05/2015). By implementing an open-door policy and encouraging employees to use the access this provides, EPA Employee 6's regional administrator has offered a culture of both openness and communication for their region. EPA Employee 6 describes the culture and communication advocated by their regional administrator as follows: "If you have something valid and important to say and you're thoughtful about it, you're going to get listened to. I think that's an ethic that we try to live by here in the region" (personal communication, 11/05/2015).

In EPA Employee 2's region, email communication was seen as an impersonal means to address employee issues relating to the work environment. Employees felt as though they were receiving communication about the issues but not the *type* of communication they wished to receive. "As a result of our [FEVS], our regional administrator started a monthly meeting with

all ... the dates set a month in advance and we just make sure that people can talk about whatever they want to. It's an hour-long meeting" (EPA Employee 2, personal communication, 10/30/2015, brackets mine). The access to the regional administrator as well as the time allocated to address regional employee concerns both communicate a culture of open-access and directly address employee concerns communicated through the FEVS results.

A similar approach was implemented by EPA Employee 8's region with the idea that the regional administrator should communicate directly with the employees of the region about the last year's accomplishments, the future of the region, and how the past accomplishments and future plans may tie into FEVS results (personal communication, 01/12/2016). By holding a first-ever town hall meeting open to all employees this regional administrator was able to communicate efficiently with employees, tie concerns about communication from the FEVS into action items for the future, and address employee concerns about long-term regional planning (EPA Employee 8, personal communication, 01/12/2016).

The development of a regional newsletter to communicate changes in employment, temporary employment assignments, training and development opportunities, and other items of interest were mentioned by EPA Employee 8 as middle management interventions (personal communication, 01/12/2016). While the newsletter serves as a means to communicate directly with the region's employees, a second form of communication, a suggestion box, is used as a way to identify topics of interest. The suggestion box was implemented to provide employees with a means to offer suggestions anonymously, but EPA Employee 8 reports that it has also been a means for employees to ask questions about the region, its programming, or activities (personal communication, 01/12/2016). The questions received in the suggestion box are used to develop newsletter content about the particular issue in question. The newsletter has been used to

communicate about regional allocations for quality step increases, how to express interest in a temporary job assignment, employee job promotions, and the hiring of new employees.

2. Middle managers impact participatory decision-making.

Middle managers have a role in how participatory decision making is developed in their organization – whether it is encouraged or discouraged. While Floyd and Wooldridge (1992) found that middle managers often use employee groups to share information and encourage employee training, this study finds that regional administrators created interventions which encouraged employees to participate in decision-making and advocate for the employees' particular areas of interest, an extension of Floyd and Wooldridge's findings. For example, in EPA Employee 6's region, the regional administrator has encouraged active participation by developing a non-hierarchical view on project reporting. "If an employee has been working on a project and they are a GS-7 or they have been here for two years, if that project comes to the attention of the regional administrator, they'll be in the room briefing the regional administrator on the project" (EPA Employee 6, personal communication, 11/05/2016). The idea behind this practice is to encourage employees to participate in their project's advocacy and decisions on the project.

Another way that EPA Employee 6's regional administrator encourages participatory decision making is through the implementation of employee-run groups to tackle the region's many challenges. One of those groups is the Global Climate Change Network which involves employees from every division within the region who cooperate to address issues before and as they arise. For example, the Global Climate Change Network has discussed rising seas as an outcome of climate change which may impact environmentally contaminated areas. Another regional administrator created an employee advocacy group to identify the issues and solutions

related to marine waste (EPA Employee 2, personal communication, 10/30/2015). The marine waste employee group was given some funds to sponsor academic research on the micro particles found in marine waste and was tasked with identifying regulatory means to encourage marine waste cleanup and discourage continued marine waste (EPA Employee 2, personal communication, 10/30/2015). The employee groups have been empowered by their respective regional administrator to discuss and come up with ways to address the challenges identified (EPA Employee 6, personal communication, 11/05/2015; EPA Employee 2, personal communication, 10/30/2015).

Another regional administrator has encouraged the development of a Labor-Management Council to address issues of concern identified by the employee union (EPA Employee 5, personal communication, 11/04/2015). The Labor-Management Council meets quarterly and is tasked with identifying issues and developing solutions to those issues. One such issue identified by the union representatives is the idea of a maxi-flex work arrangement (EPA Employee 5, personal communication, 11/04/2015). The idea behind this work arrangement is that employees are free to set their schedule daily with no set hours each day with the understanding that each employee will meet the number of hours needed for each pay period by the end of the pay period. While this idea is still in the negotiation phase, it is an example of participatory decision making by employees and management within the region.

3. Middle managers translate policies into practice.

The literature on middle managers has stated that middle managers translate policies developed by the executive level into organizational practice (Floyd & Wooldridge, 1992)

Regional administrators have either modified or passed-through interventions developed by the executive level. In Section C of this chapter, this study discussed the difference between a "pass-

through" policy and a "modified" policy. In addition, this study finds that middle managers may initiate their own interventions, an extension to the work of Floyd and Wooldridge (1992).

An example of a strictly pass-through initiative is the EPA employee awards and rewards program. EPA headquarters gives out awards to employees such as gold, silver, or named awards to recognize employees at the agency-level (EPA Employee 4, personal communication, 11/03/2015). These awards can be considered a pass-through as they are presented at the regional level but initiated by the executive-level.

The FEVS teams at the regional level can be considered a modified intervention. Each region was tasked with developing a regional FEVS team following the drop in FEVS scores after 2012. The regional administrators modified this executive-level intervention by focusing on the regional-level scores and the trajectory of the scores. For example, EPA Employee 5 noted that their region focused on, "certain areas of the [F]EVS, [such as] training, rewards and awards" (personal communication, 11/04/2015, brackets mine). In turn, the regional administrator for Region I used suggestions from this group to develop their own interventions.

An initiative that could be considered as either a pass-through or as modified, depending on the region in question, is the concept of Alternative Work Schedules. Alternative Work Schedules are those work schedules which fall outside of the normal, 8 a.m. – 5 p.m., Monday – Friday schedule such as four ten-hour days per week or four nine-hour days and one four-hour day per week. While most regional administrators have implemented this executive-level initiative as a pass-through, other regional administrators have modified the policy to fit their region. EPA Employee 5 reports that supervisors within their region are restricted from using Alternative Work Schedules so that the supervisors are available during a normal 8 a.m. – 5 p.m. Monday – Friday schedule to be able to meet with the supervisors' employees who may be

utilizing an alternative work schedule (personal communication, 11/04/2015). Additionally, all employees are expected to be available during "core business hours" of 9:30 a.m. – 3:30 p.m. Monday – Friday to ensure that the region's needs are met (EPA Employee 5, personal communication, 11/04/2015). This modification, including restricting certain classifications of employees from utilizing Alternative Work Schedules and identifying core hours of operation, was from the executive-level intervention to fit the needs of Region D.

An example of a middle management initiated intervention is the focus on communication by the regional administrator of Region I. A combination of communication activities, including a newsletter, a website, and an all-hands, in person town hall were developed by the regional administrator in response to FEVS scores suggesting that communication in the region was poor (EPA Employee 8, personal communication, 01/12/2016).

E. Research Question 2: Do middle managers act primarily to implement the directives of those at the executive level, or do they initiate their own interventions?

This study identified seven executive-level interventions and seven middle-management level interventions implemented by regional administrators in the EPA. A listing of these interventions can be found in TABLE VIII on page 84. Of the executive-level interventions, five are utilized as both a "pass-through" and six have been found to be "modified." Of the seven middle-management level initiatives, one of the seven was found in one region while the remaining six found in multiple regions.

Given the equal split between executive-level interventions and middle management-level interventions, this study finds that middle managers do not act primarily to implement the directives of the executive level. While executive-level interventions were identified by each interviewee as implemented in their particular region, each interviewee also identified particular

interventions initiated by their regional administrator. Regional administrators have and do initiate their own interventions designed to impact employee work motivation including rewards, awards, recognition, communication, regional workgroups, training, development, and changes to the work environment. In TABLE IX, MIDDLE MANAGEMENT INTERVENTIONS BY REGION, each interviewed region is cross-referenced with each intervention utilized within the region. The range of middle management interventions was as low as one (Region D) to as many as six (Regions A & J). The mean number of middle management interventions per region is 4.2.

TABLE IX

MIDDLE MANAGEMENT INTERVENTIONS BY REGION

Intervention	Region A	Region D	Region G	Region I	Region J
Communication	X			X	X
FEVS Work Groups	X				
$(Region)^9$					
Recruitment			X		X
Regional Working	X		X	X	X
Groups					
Team-Building	X		X		X
Training and	X	X	X	X	X
Development					
$(Region)^{10}$					
Work Environment ¹¹	X		X		X
Total Number of	6	1	5	3	6
Middle Management					
Interventions					

⁹ In this instance, one particular region was proactive in initiating a FEVS working group prior to the executive-level

¹⁰ Some regions have specific training and development initiatives initiated by their regional administrators to address regionally-specific training needs.

¹¹ This category includes changes to the physical working space, as well as initiatives designed to address issues which may impact the working environment for employees, such as work-life balance, childcare facilities, or physical fitness initiatives (standing desks, workout facilities)

F. Research Question 3: How consequential are middle management interventions with regard to employee work motivation?

This study identified middle management interventions initiated by regional administrators in the EPA, reviewed data from the PPS' BPTWFG, and matched interventions to each region's BPTWFG index scores. To study the consequentiality of middle management interventions in the regions, this study compares the region with the lowest number of middle management interventions (Region D, with one), and the region with the highest number of middle management interventions (Region A, with six). In Figure 10, Comparison of Region A and Region D BPTWFG Index Scores, the region with the minimum number of middle management interventions (Region D) is compared against the region with the maximum number of middle management interventions (Region A). Figure 10 only includes interventions initiated at the middle management level, not executive-level interventions of any type. Using the BPTWFG index score as a measure of consequentiality of middle management interventions, Figure 10 shows the trajectory of Region A's scores which fell over time, similarly to those of the regional and agency scores. During this same time, Region D's scores fell at a faster rate than that of Region A, the regional and agency scores. While scores rose for Region A, the regional average and the agency average in 2014, Region D continued to fall. In Figure 11, Comparison of Region A and Region D, BPTWFG Percentage Change Over Time, 2010-2015, Region A's scores are higher than Region D's scores in each year, and are higher than the EPA agency and regional average scores. When Region A's scores, the regional average scores, and the EPA's scores rose between 2014 and 2015, Region D's scores fell, deviating sharply from Region A's scores, the regional average scores, and the EPA's scores. Additionally, Region D's percent change over

time remained negative for each year of the study, 2010-2015, unlike Region A's scores which rebounded between 2014 and 2015.

When comparing Region D and Region A in terms of initiated middle management interventions, Region D had one initiated middle management intervention, while Region A had six initiated middle management interventions. As such, this study finds that regions with a greater number of initiated middle management interventions will have higher BPTWFG scores. This study finds that middle management interventions are consequential to employee work motivation, as evidenced by the BPTWFG index scores.

Figure 10

Comparison of Region A and Region D BPTWFG Index Scores

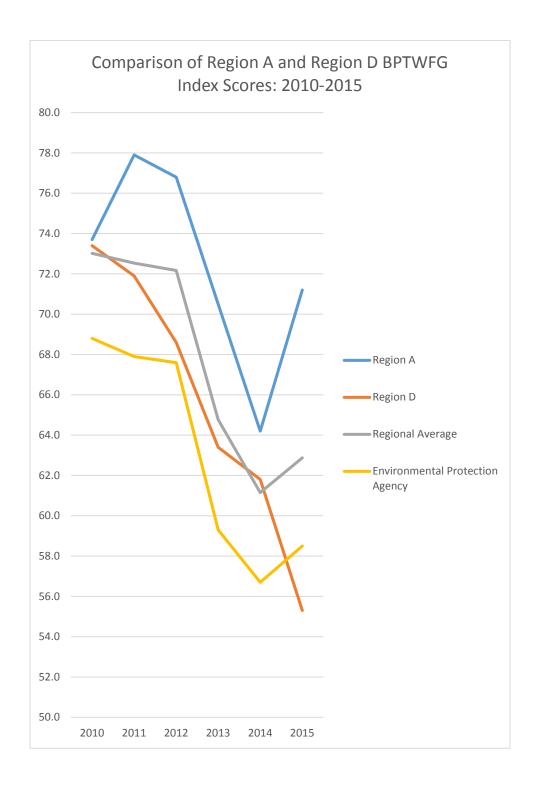
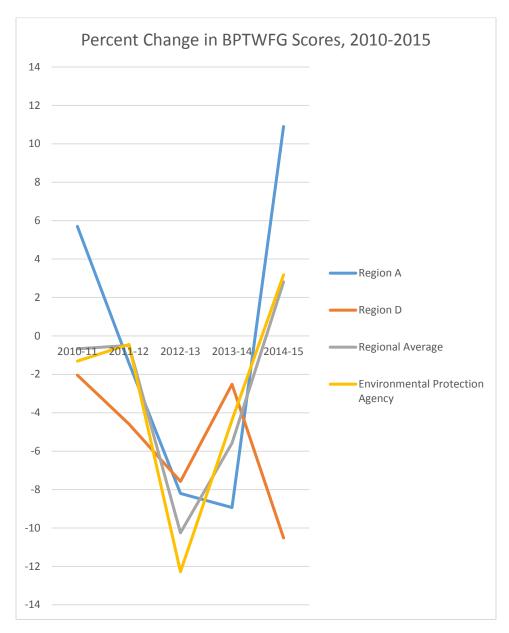


Figure 11

Comparison of Region A and Region D BPTWFG Percentage Change Over Time



VII. DISCUSSION

This chapter will compare and contrast this study's findings with findings previously discussed in the literature and identify how this study contributes to the literature. The research findings from this study include the role of the middle manager, the types of interventions utilized by middle managers, the names of the interventions initiated by middle managers, and that those interventions were consequential to work motivation. Each finding will be considered individually and compared to previous research.

A. Role of the Middle Manager

Regional administrators, in this study, are those managers who serve as an intermediate level of management between the executive level and the supervisory level, which agrees with Likert's (1961) finding of middle managers as linking pins in an organization. Regional administrators are the linking pins between the EPA Administrator and the regions that each regional administrator serves. Regional administrators are subordinate to the EPA Administrator, equal to other regional administrators, and serve as the superior to regional managers, an organizational standing which supports Uyterhoeven's (1972) definition of middle managers as those managers which are subordinate to the executive, equal in standing to peer middle managers, and serve as a superior to subordinate managers. In their role as middle managers, regional administrators help connect geographically disconnected regional offices with the Environmental Protection Agency's headquarters, which supports findings by Floyd and Wooldridge (1999) and Balogun and Johnson (2004) which state that middle managers are often responsible for an office or area disconnected from the main organization by virtue of geography. The findings of this study amplify the description of middle managers by using the placement of regional administrators within the organizational structure to define their organizational place as "middle management,"

by identifying the regional administrator's geographic focus as a characteristic of middle management, and by finding that regional administrators are the linking pin between the EPA Administrator and Regions by acting as both the coordinator and operator of activities in their region.

Regional administrators have three main roles as middle managers according to the findings of this study. First, regional administrators serve as the communication and cultural touchstones for their organization. Second, regional administrators determine the degree of participatory decision making by their organization's employees. Finally, regional administrators translate policy into practice.

As an example of how the literature views efforts by middle managers on communication and culture, Floyd and Wooldridge (1992) stated that middle managers present information about their organization to the executive-level and cultivate organizational adaptability by the development of working groups designed to creatively solve current and future organizational problems. In this study, regional administrators in Regions A, I, and J actively communicated with organizational employees through the use of direct, face-to-face communication, newsletters, and open-door access within their regions, a finding which extends the work of Floyd and Wooldridge and their definition of organizational adaptability to include the means used by Regions A, I, and J. Madlock (2008) stated that effective superior communication can impact, "subordinate's job satisfaction" (p. 61). Regional administrators in regions A, G, I, and J have initiated middle management interventions designed to enhance their communications to the region. Madlock's work was focused on the supervisory level, and this research, with its focus on the middle management level, amplifies the findings to include interventions by middle management on communication as having a positive impact on work motivation.

Regional administrators in Regions A, I, and J actively cultivated a culture of access and accessibility to information for their regions, an approach which Nyhan (1999) noted built trust at the supervisory level. Creed and Miles (1996) found that information flow from the executive to the supervisory level is directly impacted by middle management, and that access to information allows trust to be developed. This study found that Regions A, I, and J implemented all-hands meetings designed to offer employees a chance to voice their opinions and concerns, and this study found that those efforts in communication positively impacted the work motivation of the regions listed. This finding adds to the literature on middle managers by identifying similar positive results in communication efforts by middle managers as Balfour & Wechsler (1996) found. Balfour and Wechsler found that communication from supervisors to subordinates helped to build work motivation in the subordinates. According to Howard and Frink (1996), an employee's work satisfaction can be positively impacted by communication by supervisors in regards to organizational change. In Region I, the regional administrator welcomed a Labor-Management study to determine how management and the unions could work together productively (EPA Employee 8, personal communication, 01/12/2016). By welcoming the Labor-Management study and the potential change it could bring to the region, the regional administrator in Region I communicated a willingness to change the region, and an openness in how that change could be accomplished. This study finds that communication by middle managers also has a positive impact on work motivation, a finding not previously identified in the literature on middle management actions.

Regional administrators encouraged participatory decision making and an organizational learning culture for employees in their organizations by the development of employee work groups to address regional issues (Regions A, I, J), encouraging employees to present their

project's findings to the middle management level (Region J), and the development of a Labor-Management Council to address issues brought forth by employee unions (Region I). Balfour and Wechsler (1996) found that participation in organizational decision making had a strong, positive association with organizational commitment. This study finds that when middle managers develop opportunities for regional employees to participate in organizational decision making, such as regional working groups (Regions A, I, J), that action has a positive impact on work motivation for regional employees. Wright and Davis (2003) found that the less creativity an employee has in their work, the lower the job satisfaction. They recommended that public employers seek to engage the creativity of their workforce through encouraging employees to look for alternate solutions to problems (Wright & Davis, 2003). In this study, regional administrators in regions A, G, I, and J developed regional working groups to offer employees opportunities to creatively solve the region's ongoing and future issues. The findings of this study suggest that when middle managers actively develop working groups for subordinates, work motivation is positively impacted.

Joo and Park (2009) found that a commitment on the part of the organization to create an organizational learning culture can positively impact organizational commitment of its employees. This study finds that middle management initiatives related to participatory decision making and an organizational learning culture, such as the development of employee work groups by the regional administrator which are focused on learning (such as the Global Climate Change Network in Region J), also contribute to positively impact work motivation, adding to the literature on middle managers and their impact on work motivation. This extends Joo and Park's findings to include middle management actions on their organization's learning culture can positively impact work motivation.

Floyd and Wooldridge (1992) found that middle managers role of, "facilitating adaptability" included the development of employee groups to encourage learning in the middle manager's organization. In the case of Regions A, G, I, and J, regional administrators developed working groups to critically examine the FEVS scores for the region (Regions A & J), address specific regional issues (such as marine waste in Region G), or to implement employee-requested human resource options like temporary work assignments to allow employees to try out different roles in the region (Region I). While Floyd and Wooldridge noted this as part of the middle manager's role in encouraging learning within the work environment, they did not discuss how the development of employee groups by middle managers could positively impact work motivation of the middle manager's subordinates. This study extends their research to include the impact of middle management actions on work motivation.

This study found that regional administrators translate policy into practice whether it be policy developed at the executive level or policy developed at the middle management level. This study identified three types of actions by middle managers to translate policy into practice. First, a middle manager can "pass-through" a policy developed by the executive of the organization, such as when regions A, G, I, and J implemented telework in their regions. In these cases, the regional administrator passed-through the intervention developed by the EPA for use in their region. Employees were equally allowed to telework, regardless of organizational hierarchy, e.g. management or staff.

A second example of an action by a middle manager is the "modification" of an executive-level intervention, such as the modification made by the regional administrator in Region D in regards to alternative work schedules. In this example, the regional administrator modified the executive-level intervention on alternative work schedules by limiting its use to non-supervisory

personnel in Region D. Scandura and Lankau (1997) found that executive-level interventions, such as flexible work hours, had a positive impact on the job satisfaction of employees within organizations. Those regions which passed-through executive interventions relating to flexible working hours (telework, alternate work schedules) had higher BPTWFG scores than the region which modified telework and alternate work schedule policies to limit their use by supervisory employees. Saltzstein, Ting, and Saltzstein's (2001) found that, "no single policy or limited set of policies is likely to make much of a difference to employees" with different family demands (p. 463). This study extends the work of Saltzstein et al (2001) by suggesting that limiting the application of policies such as flexible working hours could be detrimental to work motivation. As no other region in this study had BPTWFG scores fall each year, the executive level interventions modified by Region D may suggest that modified executive level interventions may be consequential to work motivation.

Finally, the third example is that of a middle management intervention initiative. In this instance, the regional administrator developed and implemented the intervention without guidance from the executive level. In the case of Region A, the regional administrator developed a position designed to enhance the work-life balance of employees within the region. In Region A, there is now a full-time, regionally-funded position tasked with developing work-life initiatives for the region. The position is competitive, with interested regional employees vying for the opportunity to serve a year-long temporary detail as the work-life coordinator. Wright and Davis (2003) found that job characteristics, such as those that impact personal and educational growth, can be influenced by the executive-level. In this study, the regional administrator in Region A has developed a position designed to impact the personal and educational growth of

the employee holding the position. This study finds that middle managers can also impact job characteristics of their employees, an extension of the findings of Wright and Davis.

This study adds to Floyd and Wooldridge's (1992) findings that middle managers implement policy developed at the executive level, the "pass through" mentioned earlier, but did not mention how middle managers can modify those executive level initiatives to fit their regions' needs or that middle managers may develop their own initiatives to implement. In this study, a finding is that middle managers not only directly implemented the policies and practices developed at the executive level, such as Regions A, I, G, and J with regards to telework, but may have modified the executive level policies, such as Region D's regional administrator did in regards to telework and alternative work schedules. Additionally, middle managers in this study, such as the regional administrators in Regions A, G, I, and J initiated their own interventions (the work life coordinator, marine waste workgroup, newsletter, and Global Climate Change Network, respectively) designed to positively impact work motivation, a finding not previously discussed in the literature.

In Table X, Role of the Middle Manager in the Literature and Study Findings, a visual depiction of this study's findings as compared to previous scholarly work. The table is divided into three sections; Communication and Culture, Participatory Decision Making, and Translation of Policy Into Practice, with both this study's findings and the literature for each of the sections shown. In Table X, the columns designate in which region each finding is located and findings from previously published work. Please note, that while this study does have roots in the middle management literature, the findings of this study extend the work to include culture, a broader view of information sharing, participatory decision making, and an expansion of policy into practice to include middle managers as initiators of interventions.

TABLE X

ROLE OF THE MIDDLE MANAGER IN THE LITERATURE

AND STUDY FINDINGS

Role	This Study	Executive Literature	Middle Management Literature	Supervisory Literature
Communication and Culture	Region A, Region G, Region I, Region J		Floyd and Wooldridge, 1992 ¹² , Creed & Miles, 1996 ¹³	Balfour and Wechsler, 1996; Nyhan 1999; Wright and Davis, 2003; Madlock, 2008
Participatory Decision Making	Region A, Region G, Region I, Region J	Garvin, 1993		Balfour and Wechsler, 1996; Wright and Davis, 2003
Translation of Policy Into Practice	Region A, Region D, Region G, Region I, Region J	Howard & Frink, 1996; Balfour & Wechsler, 1996; Saltzstein, Ting & Saltzstein, 2001; Kinnie, Hutchinson, Purcell, Rayton & Swart, 2005	Floyd and Wooldridge, 1992 ¹⁴	

¹² Information sharing through development of employee groups.

¹³ Information sharing.

 $^{^{14}}$ Translation of executive level policies into practice, not development of initiated middle management interventions.

B. Types of Interventions Utilized by Middle Managers

This study found three types of interventions utilized by regional administrators. The first is those interventions initiated and developed at the middle manager level without direction or guidance from the executive level. The second type is the modified executive-level intervention. The modified intervention was developed at the executive level, but modified by the middle manager to suit the needs of his/her organization. The third type is the pass-through intervention. Pass-through interventions are also developed at the executive level, but are implemented 'as-is' by the middle manager, without any modification.

In the literature, Floyd and Wooldridge (1992) found that middle managers can, "implement deliberate strategy" developed by the executive level in their organization (p. 155). This study adds to the literature on middle managers by expanding the possibilities of middle management interventions from just direct implementation of strategy designed and developed at the executive level, known as "pass-through" in this study, to include modified executive level interventions and initiated middle management interventions. In modifying executive level interventions, middle managers utilize the framework of the intervention but adjust the intervention to suit the needs of their organization. In the case of Region D, the regional administrator modified telework in their region to exclude management's participation. By excluding management, the regional administrator ensured that regardless of their subordinates' work schedules, management would be available and present to meet with them as needed. The initiated interventions are developed by middle managers for use within their organization, without direction or input by the executive level. For Region A, this included the creation of a work-life coordinator position, designed to positively impact the work-life balance of the region's employees.

C. Names of Interventions Initiated by Middle Managers

In this study, the names of the interventions initiated by middle managers were used to compare findings across the regions. For example, if an interviewee mentioned "working groups" as an intervention used by their respective regional administrator, details about the working groups were sought, including the focus of the working group, participants in the working group, longevity of the working group, and accomplishments by the working group. This allowed for a more specific comparison of middle management interventions among regions and pinpointed the implementation of the intervention with regards to the region. As this study focused on the years 2010-2015 and the BPTWFG scores derived from the FEVS in those years, interventions which were initiated prior to 2009's FEVS, and after 2015's FEVS was conducted were not considered within this study.

Middle managers in this study utilized fourteen different types of interventions, executive level and middle management level, within their regions. The interventions initiated by middle managers included communication, awards and recognition, FEVS working group, recruitment, regional working groups, team building, training and development, and work environment. While each of these interventions varied by the regional administrator who implemented them, a common denominator was the focus on improving work motivation within the region. The communications initiatives included a newsletter, a town hall meeting, monthly all employee meetings, and updated internal webpages. Awards and recognition at the regional level were often focused on regional goals, and the employees who met those goals. Working groups in the regions varied from task-specific, such as a marine waste focus, to open-ended, such as the workgroup created to address issues related to FEVS results. For team building, training and development, some of the regional administrators implemented special in-house trainings

designed to improve teamwork, address specific regional needs, or specifically asked employees about training opportunities needed within the region. Finally, work environment improvements initiated by regional administrators included office redesign to improve space allocation within the offices, installation of stand-up desks, access to gym facilities, and improvements to meet LEED certified standards.

D. Interventions in this Study Consequential to Work Motivation

In this study, fourteen different interventions were identified in the five regions interviewed, with seven of them executive-level modified, and seven of them initiated at the middle management level. The highest number of interventions at any one region interviewed for this study was ten (Regions A & J), while the lowest number of interventions in any region was five (Region D). Please see TABLE VIII, INTERVENTIONS, for specifics of each region in regards to Executive Level Modified and Middle Management Level Initiated. What is particularly interesting about the number of interventions and their regions is that middle management interventions were changing over time in each region. For example, Region I did not initiate middle management interventions until 2014, but did implement two modified executive-level interventions during the time period of the study (2010-2015). Region D had one initiated middle management intervention, but discontinued it in 2015, but modified four executive-level interventions. In two of the four modified executive-level interventions (alternative work schedules and telework), Region D was the only region to modify, limiting these modifications use to those employees not in supervisory roles.

These changes to middle management interventions, whether to initiate or discontinue, appear to have impacted the scores of those regions. Region D's scores fell after the one middle management intervention was discontinued, while Region I's scores had a positive trend after

adoption of middle management initiatives. In the case of Region J, many middle management initiatives were implemented early (2010), and remained throughout the time period of this study – and its scores, while falling a bit during from 2012-2014 (similar to all other regions), their scores rebounded between 2014 and 2015. In Region D, during this same 2014-2015 time period, the BPTWFG scores fell. This study finds that middle management interventions are consequential to work motivation.

Previous literature on middle management suggests that communication is consequential to work motivation (Creed & Miles, 1996). Creed and Miles (1996) find that, "undistorted communication," that is, communication that is both candid and truthful, is seen as a way to build trust and work motivation in employees (p. 273). Interviewees in Region A suggested that the lack of information from headquarters about the sequestration and shutdown in 2013 negatively impacted their region's work motivation and trust in the regional administrator's communication of agency and regional information (EPA Employee 3 and EPA Employee 4, personal communication, 11/03/2015). As the EPA headquarters wanted to, "control the message" about the sequestration and shutdown, Region A's employees perceived that the regional administrator knew more than they about these events, and that the regional administrator was not sharing information with them (EPA Employee 3, personal communication, 11/03/2015). Due to the executive level of the EPA requiring that regional administrators pass-through the information about sequestration and the government shutdown, the regional administrator in Region A, among others, was thwarted from initiating their own communications intervention in the region during this stressful time. In Region I, after the regional administrator initiated middle management interventions designed to positively impact

communication in the region, the region's BPTWFG scores soared (EPA Employee 8, personal communication, 01/12/2016).

This study suggests that interventions by middle managers, such as awards, rewards, and recognition; communication; recruitment; regional working groups; team-building; and work environment, are consequential to work motivation of employees at a large-scale, public agency. Further, this study finds that middle managers do not act primarily to implement the interventions developed at the executive level. Middle managers in this study did more than just implement the interventions handed down by the executive level – they modified the interventions as needed, and developed their own interventions to positively impact their organization.

VIII. CONCLUSIONS

A. Limitations

The study was conducted in one federal government agency with regional offices governed by middle managers known as regional administrators. This study's findings would generalize best to large-scale public organizations. Organizations which may meet this criteria include federal government agencies with regional offices, and state government agencies, such as the Bureau of Motor Vehicles or the state employment agency offices, with offices geographically-distant from the organization's headquarters and which may employ a middle manager who has a degree of autonomy. The EPA is representative of many federal agencies which have regional offices geographically-distant from headquarters, with a middle manager as the head of the regional office. Agencies such as the Social Security Administration, Department of the Treasury, the armed services, and the State Department, among others, have operations outside of their headquarters which service a particular geographic location or focus and are headed by a manager.

Further, the EPA's regional administrators, due to geographic distance and organizational hierarchy, have a level of autonomy which may not be available to middle managers in other public organizations. For example, in a geographically-close and/or a smaller organization, middle managers may well follow Floyd and Wooldridge's (1992) finding that middle managers serve as the translators of executive-level policies into practice, and are without the ability to modify those policies or to create their own policies, as this study demonstrated. Without an understanding of how much autonomy a middle manager has, it would be difficult to translate this study's findings into a greater understanding of large-scale public agencies. This study suggests a remedy for that understanding within the Future Research section. In terms of the

federal government level, perhaps questions on the FEVS could be developed specific to middle management's actions within the work environment.

A limitation of the study is that using the number of executive-level modified or middle management-initiated interventions is an imperfect measure of the extent of middle manager involvement. While using a count of interventions may shed light on the activity of a regional administrator with a greater number of interventions signaling greater activity on the part of the regional administrator, it does not adequately measure the depth or breadth of the interventions. The breadth of the intervention, that is, how broadly applied the intervention was within the region, cannot be captured by counting an intervention as one intervention. Breadth in this context refers to the proportion of regional employees impacted by a particular intervention. For example, Region D's regional administrator limited the use of alternative work schedules and telework to non-supervisory employees, a modification of an executive-level intervention. By doing so, Region D's regional administrator limited flexibility in scheduling for management of the region, which may have negatively impacted the work motivation of management employees within the region. Thus, a count of interventions may not adequately capture the true impact of the interventions on the region.

A simple count of interventions also does not account for the depth of each intervention. Depth in this context refers to the length of time each middle management intervention was in place. For example, in Region I, the addition of communication-based middle management-initiated interventions appeared to make a positive impact on BPTWFG scores in that region after they were implemented following the 2013 FEVS. These included a town-hall meeting, updated regional website, and an employee newsletter, among others. What is known is that the BPTWFG score in Region I increased by nearly 16% between 2014 and 2015, as compared to

the regional average of roughly 3%. Whereas, in Region J, the regional administrator initiated communications-based interventions from early in 2010, from which a five year window of BPTWFG data can be viewed. These interventions included open-door access to the regional administrator, all-hands meetings, social/community service events, and other regional events, such as those relating to the climate change programming, sustainability, and special emphasis programs. With Region I, the BPTWFG scores suggest that these efforts made a difference in 2014-2015, but for Region J, the BPTWFG scores remained higher than the regional average all five years. A count of interventions does not provide a clear picture of how long-term versus short-term interventions impact BPTWFG scores.

Another limitation of this study relates to the limited access granted the investigator. The Environmental Protection Agency has been the subject of a number of Congressional inquiries and has faced calls for its abolition from members of Congress, Presidential candidates, and some members of the media in recent years. As a result of these inquiries and calls for abolition, the EPA appears to be especially sensitive to inquiries about its operations, activities, and personnel from outside researchers such as this author. Thirty individuals were contacted for participation in this research, representing all ten regions. Of the ten regions, five agreed to participate, three declined to participate, and two did not respond to initial or secondary inquiries. As such, not all regions were included in this study, although all regions were invited to participate. While the author feels fortunate that eight individuals from the EPA participated in this research, it should be noted that the EPA has over 15,000 employees in hundreds of positions at headquarters and at the regions. This study was limited by the access granted by participants, but acknowledgement must be given to the political conditions under which the

EPA operates on a daily basis, which are similar to the political conditions under which all federal agencies must operate.

Given that this study focused exclusively on the issue of employee work motivation, the question arises as to whether the findings can be extended to other areas of RA responsibility. A key consideration in this regard has to do with the amount of discretion they are afforded. For example, although the regional administrators in this study were afforded considerable discretion in the area of work motivation, in other areas such as budgeting, they were afforded considerably less discretion. This study's finding of the consequentiality of middle manager actions is presumed to be, to an extent, a function of the middle manager's level of autonomy. In other words, if a middle manager has autonomy to either modify executive-level interventions or initiate their own middle management interventions, the middle manager's actions may be consequential.

The area of budgeting serves as a counterexample. When the EPA regions were granted permission to offer early retirement buyouts for their employees, the guidelines for these buyouts were set by the Office of Management and Budget (OMB) (EPA Employee 2, personal communication, 10/30/2015). The timing of the buyouts had to be budget-neutral, that is, the buyout payment to each retiree could not exceed what was already budgeted for their salary for the year. The regional administrators were given permission to offer buyouts to a certain number of employees (a number set by the executive level) and all retirement buyouts had to be completed by early April to maintain budget neutrality (EPA Employee 3, personal communication, 11/03/2015). While regional administrators were given considerable discretion to determine which employees would be offered buyouts, there was no guarantee that potential retirees would take the buyout offered. With budget neutrality as the goal, regional

administrators were also prevented from hiring new personnel to fill the retirees' positions right away.

While the Office of Management and Budget set the guidelines for the buyouts, the executive level of the EPA set the number of retirees per region eligible for early buyout and also, according to EPA Employee 2, acted to reserve the savings from the payroll for agency use, leaving the regional administrators without immediate funds for new hires, all of which were limitations on the autonomy of middle managers in this study (personal communication, 10/30/2015). While the regional administrators had some autonomy in ultimately choosing which regional employees would receive buyouts, the guidelines were set by another agency, and the resultant payroll savings had to be negotiated back from the executive level, signs of limited budget autonomy for middle managers.

With regard to the question of whether and to what extent this study's findings can be generalized beyond just work motivation, a continuum of middle management autonomy should be developed. Budgeting or public relations actions for the region fall into the low autonomy category, because these activities are highly structured, regulated, and/or political in nature. Those activities with limited structure and/or regulation such as work motivation or development of culture for the region, should be considered to be in the high autonomy category. Other middle management duties might fall closer to the middle of the continuum, such as human resource activities. Human resource activities do involve regulations but some middle management autonomy may be allowed. For example, in Region I, the regional administrator created a temporary job assignment board for interested employees, an activity that falls into the human resources category, but one which does allow managerial discretion. As such, the findings of this study regarding middle manager consequentiality are contingent on the degree of

autonomy the middle manager is afforded. With greater autonomy, middle managers have more opportunities to make a difference in their work environment.

B. Future Research

Middle managers, and their impact in and on organizations are subjects that need more exploration in the public administration literature. While the literature in public administration has looked at the activities of middle management, an extension to this research would be to study other large-scale public organizations to determine if their middle managers also initiate interventions, as well as pass-through and modify interventions from the executive level. With this study's findings of how middle managers can initiate their own interventions or modify executive-level interventions, the development of a survey of middle managers within the public sector at all levels (federal, state, and local) may offer particular insight into what types of middle managers are given the autonomy to develop their own interventions or to modify interventions from the executive level. While some levels of government, particularly small local governments, may not have the depth of management within the organizational chart to allow for autonomous actions by middle managers, larger local governments, such as counties or large municipalities, may have middle managers with some autonomy. Additionally, some state government agencies may have offices in geographically disconnected areas such as the Bureau of Motor Vehicles or state employment offices which may have middle managers with some degree of autonomy as their head. By surveying middle managers in all levels of government, a greater understanding of the role of middle managers and the degree of autonomy given to middle managers may afford insight into the actions and activities of middle managers in the public sector.

The concept of who is considered a middle manager in a large-scale public organization should also be explored. While public sector and private sector literature accept that middle managers exist, an exploration of the concept of middle manager should be conducted. For example, in this study, the author identified regional administrators as middle managers based on previous definitions developed in the literature. Some questions that should be considered include: are all managers below the executive and above supervisory appropriately categorized as middle managers? Should researchers employ a more nuanced categorization such as highmiddle, middle-middle, and low-middle levels of middle managers? What activities, roles, responsibilities, and organizational positioning define a middle manager – and perhaps more importantly, are some middle managers more executive level than middle manager (such as some of the interviewees in this research suggested regional administrators were), or are some middle managers closer to the supervisory level of management? In the EPA, managers who are technically in the middle management layer based on the broad definition used above include the regional administrator, the deputy regional administrator, the assistant regional administrator, branch chiefs, assistant branch chiefs, division chiefs, assistant division chiefs, and directors. In the organizational structure of the EPA, these positions are not equal on the organizational chart nor are their duties similar yet all are considered middle management.

The research on middle management interventions should explore the interventions attributed to other levels of management to determine if similar interventions at the middle management level can have a positive effect on work motivation. For example, previous work on executive-level interventions has found that restructuring the work environment, including changes in the physical layout of workspaces, changes in actual office location (such as relocation or closure), and changes in work groups can have an impact on work motivation (Howard & Frink, 1996). In

this study, Regions G and J were in the process of changing physical layouts of workspaces and relocation of workspaces, but none of these changes were complete prior to the 2015 BPTWFG, and thus could not be considered within this study. Future research could consider how these changes in Regions G and J impacted work motivation of their employees to determine if findings are similar to what Howard and Frink (1996) found with the executive level. Similar studies could be conducted on other large organizations with similar changes in physical workspaces and relocations of workspace spearheaded by middle managers. Within the supervisory level, Moynihan and Pandey (2007) found that group culture, that is, a work environment which promotes a sense of esprit de corps, shared commitment to the organization, an emphasis on employee learning, and a sense of common values, positively impacts work motivation. A study which explores if and how middle managers can promote group culture could add to the literature on middle management actions (e.g. what works and what does not to promote group culture) and potentially add to the literature on how middle managers can impact work motivation. While this study begins to explore the different types of middle management interventions and their potential impact on work motivation, a view toward determining how particular middle management interventions impact work motivation would be a welcome addition to the literature for public administration. In the case of Region I, it is difficult to determine what particular middle management interventions had an impact on work motivation – was it all three, just one, or perhaps the combination of interventions? Much like the literature on supervisory-level and executive-level interventions has demonstrated, individual middle management interventions should be tested to determine which have a positive impact on work motivation.

Finally, this study explored middle management interventions and their impact on work motivation. While this study filled a gap in the literature regarding middle management and how its interventions impact work motivation, questions remain regarding how middle management actions impact the organization in other ways. For example, future potential areas of study for middle management interventions could include a study on middle management autonomy, how work motivation may be a unique area of autonomy for middle managers, and how the level of middle management (direct report to executive level or direct report to another middle manager) can impact the ability of a middle manager set policy for his/her area.

Middle managers who have more autonomy may be more entrepreneurial, such as Kanter's (1981) work on entrepreneurial middle managers suggests. Previous research by the U.S. Merit Systems Protection Board (2012) suggests that the level of an employee's autonomy can positively impact work motivation. A study on middle management autonomy could explore if the level of a middle manager's autonomy could positively impact work motivation for their organization – in other words, if the autonomy of middle managers translates into more autonomy at lower levels of the organization. Other studies on middle management autonomy could research whether middle managers' autonomy comes from placement in the organizational structure, from geographic distance from organizational headquarters, from the middle manager's own view of his/her work responsibilities, or from a laissez-faire approach to subordinate management from the middle manager's superior. Empirical study on each of these topics may offer a greater understanding of the functions of middle management beyond the four typologies of middle management involvement in strategy suggested by Floyd and Wooldridge (1992).

In closing, middle managers can make a difference, do more than just pass-through the executive level's interventions, and they remain a level of management which warrants additional study by researchers. Regional administrators in this study not only passed-through executive-level interventions, but modified executive-level interventions to fit the needs of their region, such as the regional administrators did in Regions D, G, I, and J with the FEVS workgroups. In other regions, regional administrators used their discretion and autonomy to create middle management interventions designed to positively impact their region's work motivation, such as Region A's regional administrator did with the work-life balance coordinator. Middle managers are more than just an intermediate level of management, and topics such as middle management autonomy and the levels of middle management, remain ripe for research.

APPENDIX

<u>Appendix</u>		
A. Federal Employee Viewpoint Survey Questions 2015	122	
B. Invitation Letter	128	
C. Interview Questions Script	129	
D. Informed Consent	132	
E. List of Documents Received	134	

Appendix A

Federal Employee Viewpoint Survey Questions 2015

(Office of Personnel Management, n.d.2)

Item Number and Text

My Work Experience

- 1 I am given a real opportunity to improve my skills in my organization.
- 2 I have enough information to do my job well.
- 3 I feel encouraged to come up with new and better ways of doing things.
- 4 My work gives me a feeling of personal accomplishment.
- 5 I like the kind of work I do.
- 6 I know what is expected of me on the job.
- 7 When needed I am willing to put in the extra effort to get a job done.
- 8 I am constantly looking for ways to do my job better.
- 9 I have sufficient resources (for example, people, materials, budget) to get my job done.
- 10 My workload is reasonable.
- 11 My talents are used well in the workplace.
- 12 I know how my work relates to the agency's goals and priorities.
- 13 The work I do is important.
- 14 Physical conditions (for example, noise level, temperature, lighting, cleanliness in the workplace) allow employees to perform their jobs well.
- 15 My performance appraisal is a fair reflection of my performance.
- 16 I am held accountable for achieving results.

- 17 I can disclose a suspected violation of any law, rule or regulation without fear of reprisal.
- 18 My training needs are assessed.
- 19 In my most recent performance appraisal, I understood what I had to do to be rated at different performance levels (for example, Fully Successful, Outstanding).

Item Number and Text

My Work Unit

- 20 The people I work with cooperate to get the job done.
- 21 My work unit is able to recruit people with the right skills.
- 22 Promotions in my work unit are based on merit.
- 23 In my work unit, steps are taken to deal with a poor performer who cannot or will not improve.
- 24 In my work unit, differences in performance are recognized in a meaningful way.
- 25 Awards in my work unit depend on how well employees perform their jobs.
- 26 Employees in my work unit share job knowledge with each other.
- 27 The skill level in my work unit has improved in the past year.
- 28 How would you rate the overall quality of work done by your work unit?

Item Number and Text

My Agency

- The workforce has the job-relevant knowledge and skills necessary to accomplish organizational goals.
- Employees have a feeling of personal empowerment with respect to work processes.
- 31 Employees are recognized for providing high quality products and services.
- 32 Creativity and innovation are rewarded.
- 33 Pay raises depend on how well employees perform their jobs.

- Policies and programs promote diversity in the workplace (for example, recruiting minorities and women, training in awareness of diversity issues, mentoring).
- Employees are protected from health and safety hazards on the job.
- 36 My organization has prepared employees for potential security threats.
- 37 Arbitrary action, personal favoritism and coercion for partisan political purposes are not tolerated.
- 38 Prohibited Personnel Practices (for example, illegally discriminating for or against any employee/applicant, obstructing a person's right to compete for employment, knowingly violating veterans' preference requirements) are not tolerated.
- 39 My agency is successful at accomplishing its mission.
- 40 I recommend my organization as a good place to work.
- 41 I believe the results of this survey will be used to make my agency a better place to work.

Item Number and Text

My Work Experience

- 42 My supervisor supports my need to balance work and other life issues.
- My supervisor provides me with opportunities to demonstrate my leadership skills.
- 44 Discussions with my supervisor about my performance are worthwhile.
- 45 My supervisor is committed to a workforce representative of all segments of society.
- My supervisor provides me with constructive suggestions to improve my job performance.
- 47 Supervisors in my work unit support employee development.
- 48 My supervisor listens to what I have to say.
- 49 My supervisor treats me with respect.
- 50 In the last six months, my supervisor has talked with me about my performance.
- 51 I have trust and confidence in my supervisor.

- 52 Overall, how good a job do you feel is being done by your immediate supervisor?
- 53 In my organization, senior leaders generate high levels of motivation and commitment in the workforce.
- 54 My organization's senior leaders maintain high standards of honesty and integrity.
- 55 Supervisors work well with employees of different backgrounds.
- 56 Managers communicate the goals and priorities of the organization.
- 57 Managers review and evaluate the organization's progress toward meeting its goals and objectives.
- 58 Managers promote communication among different work units (for example, about projects, goals, needed resources).
- 59 Managers support collaboration across work units to accomplish work objectives.
- 60 Overall, how good a job do you feel is being done by the manager directly above your immediate supervisor?
- 61 I have a high level of respect for my organization's senior leaders.
- 62 Senior leaders demonstrate support for Work/Life programs.

Item Number and Text

My Satisfaction

- 63 How satisfied are you with your involvement in decisions that affect your work?
- How satisfied are you with the information you receive from management on what's going on in your organization?
- How satisfied are you with the recognition you receive for doing a good job?
- 66 How satisfied are you with the policies and practices of your senior leaders?
- 67 How satisfied are you with your opportunity to get a better job in your organization?
- How satisfied are you with the training you receive for your present job?
- 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?

Item Number and Text

Work/Life

72 Have you been notified whether or not you are eligible to telework?

73 Please select the response below that BEST describes your current teleworking situation.

Do you participate in the following Work/Life programs?

- 74. Alternative Work Schedules (AWS)
- 75. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)
- 76. Employee Assistance Program (EAP)
- 77. Child Care Programs (for example, daycare, parenting classes, parenting support groups)
- 78. Elder Care Programs (for example, support groups, speakers)

How satisfied are you with the following Work/Life programs in your agency?

- 79. Telework
- 80 80. Alternative Work Schedules (AWS)

- 81 81. Health and Wellness Programs (for example, exercise, medical screening, quit smoking programs)
- 82. Employee Assistance Program (EAP)
- 83 83. Child Care Programs (for example, daycare, parenting classes, parenting support groups)
- 84 84. Elder Care Programs (for example, support groups, speakers)

APPENDIX B

Invitation Letter

P.O. Box 369 New Carlisle, IN 46552

October 2, 2015

Deputy Regional Administrator Environmental Protection Agency Street Address City, State ZIP

U.S.P.S. Certified Mail: 1234 5678 9123 4567 8910

Dear Mr. XX:

I am a PhD candidate at the University of Illinois – Chicago and I am researching the relative importance of middle management as a factor on work motivation. I have identified the Environmental Protection Agency as an agency of interest. I have reviewed many of the public documents available on human resource programs for current and prospective employees. As a next step, I am interested in talking with individuals who are knowledgeable and/or involved with middle management of the bureau and work motivation efforts, and those who may be impacted by those efforts. Based on the materials that I have reviewed, I anticipate that you could offer some useful insights into this phenomena or you may know someone who would be knowledgeable of work motivation efforts. My findings from this research may provide valuable insight for you and your agency how middle management can have an impact on work motivation. Following the completion of my study, I will provide you with a copy for your records and would be willing to answer any questions you may have regarding the study.

During an interview with Mr. Karl Brooks, he mentioned your name as a possible interview subject. I am therefore writing to inquire as to whether you would be willing to be interviewed on this matter or if you would be willing to recommend someone to be interviewed on this subject. The interview would be conducted over the telephone at a mutually convenient time or in person at your agency on Monday, November 2 or Tuesday, November 3, 2015. With your permission, I would like to tape the interview. The interview contents would be treated as confidential and will be accessible only to me. You would not be identified in any published material resulting from the study. Although there is no direct benefit for participants in this research, I expect to generate useful and practical information about how middle management in federal bureaus can impact work motivation.

I expect the interview to require no more than an hour of your time.

I would be grateful if you could let me know if you would be willing to be interviewed for this purpose and would welcome any questions you may have concerning this research. My phone number and e-mail address are listed below.

Sincerely,

Aleea Perry PhD Candidate University of Illinois – Chicago 412 S. Peoria St. (M/C 278) Chicago, IL 60607-7064 Phone: (317) 908-9868

Phone: (317) 908-9868 E-mail: aperry22@uic.edu.

Enclosures: Interview Questions

Informed Consent

APPENDIX C

Interview Questions Script

- P.I.: Good [morning, afternoon, evening]. This is Aleea Perry calling (My name is Aleea Perry and I am) from the University of Illinois Chicago regarding middle management's impact on work motivation at [Region {1-10, CityName}], the Environmental Protection Agency related to my paper entitled: "Middle Management Interventions as a Determinant of Work Motivation: A Case Study of the Environmental Protection Agency's Regional Offices. As you are aware, this call/interview will be taped and the contents of this interview will remain confidential. Do you have any questions of me before we commence the interview?
- P.I.: I'd like to start with a few questions related to your experience at your agency/region.
 - 1. Please tell me your name, address, phone number and [former, current] occupation (*if subject is publicly identified*). Otherwise date/time of interview will be inserted here for coding purposes.
 - 2. How many years have you worked at the Environmental Protection Agency (EPA)?
 - a. Have you always been at [Region {1-10, CityName}]?
 - b. How long have you been in your Region?
 - c. What is your current title?
 - d. Have you had any other positions at [Region {1-10, CityName}]?
 - e. What other Regions, if any, have you worked for?
 - i. If yes, to 2c); how long did you work there?
 - ii. What positions did you have there?
 - iii. Do you still have contacts at this Region?
 - 1. Who?
 - 2. What are their positions?
 - 3. What titles have you held at the Environmental Protection Agency?
 - 4. How many years have you been in government service, total?
- P.I.: I'd like to know about [Region {1-10, CityName}]'s work motivation efforts.
 - 1. I'd like to discuss any efforts made in your region relating to work motivation. Work motivation is a combined construct of employee satisfaction and work commitment efforts. The literature has said that work arrangements (such as, but not limited to job sharing, flexible work hours), communication, participation in decisions, opportunity for advancement, and efforts similar to these have impacted work motivation.
 - a. Could you describe to me any policy changes made since 2009 in your Region?
 - b. Could you estimate when each of these changes were implemented?
 - i. Are any of these policy changes similar to previous policies?
 - 1. If so, which previous policies?
 - 2. May I get a copy of these previous policies?
 - c. At what level did these policy changes come from?
 - i. Agency-wide?
 - ii. Regional?
 - iii. Supervisor-level?
 - d. Which programs are utilized by employees at [Region {1-10}]?
 - i. How are the programs utilized?
 - ii. How have the programs been received by employees?
 - iii. Are there other programs that are being considered by your region?
 - iv. What types of programs do you think would benefit your agency/region but are not currently utilized?
 - v. How can managers in your region utilize the available programs more effectively?
 - vi. Can I get copies of program guidelines for these efforts?
 - e. What other types of organizational interventions have been used to impact work motivation?
 - a. [follow up questions related to answer received, same as a & b, i-vi above]
- 2. Can you tell me how often concepts of work motivation are discussed at [Region [1-10, CityName]]?
- 3. Do you think agencies should focus on work motivation ideas and why or why not?
- 4. Do you think that regions should focus on work motivation ideas and why or why not?

- 5. Please tell me the name and title of your immediate supervisor
- a. Does [name/title] discuss work motivation with you [give list of work motivation topics to interviewee here]?
 - i. if yes, how?
- 6. Please describe your knowledge of the Partnership for Public Service's "Best Places to Work in the Federal Government" report.
 - a. Does the EPA's leadership read/review/have knowledge of this report?
 - i. If yes, how has it been received?
 - ii. If no, are you aware the report exists?
 - b. How has this report impacted the EPA's middle management regarding work motivation?
 - c. How do you view your region in light of its ranking [provide ranking]?
 - d. Do you agree with your region's ranking?
 - i. If yes, why
 - ii. If no, why not
 - e. What may be some factors which affect the region's ranking as compared to other regions?
 - f. Is there anything I have not asked that you would like to share?
 - g. Do you have any questions for me?
 - h. Do you have any concerns about the questions I have asked, the Best Places to Work report or others?

QUESTIONS SPECIFICALLY FOR REGIONAL ADMINISTRATORS/HUMAN RESOURCE PERSONNEL/SUPERVISORS

- 1. Would you please share with me any policy documents which relate to work motivation efforts at this region and agency-wide?
- 2. Would you please tell me what policies, if any, have been discontinued since 2009?
- 3. Would you please tell me what policies, if any, are currently under consideration?
- 4. Could you please tell me what is the role of [RA/HR/SUPERVISORS] in work motivation policies?
 - a. Do you make policy?
 - b. Do you implement policy?
 - c. Do you conduct an evaluation of each policy?
 - d. Do you determine if the policy is effectively implemented?
 - e. Could you tell me who uses policy (x, y, z, etc.)?
 - i. No specific names, please, just "level" or "title" of employee.
- 5. How many employees at this region use (x, y, z) policy?
- 6. How often do employees use (x, y, z) policy?
- 7. Is this limited to a specific level of employee?
 - a. Who?
 - b. Why?
- 8. Can you tell me what policies have worked well?
- 9. Can you tell me which policies did not go well?
- 10. Can you tell me what types of negative impacts did policies have, if any?
- 11. Can you tell me what types of positive impacts did policies have, if any?

QUESTIONS SPECIFICALLY FOR FRONT-LINE PERSONNEL

- 1. Could you tell me if you are aware of any policies at this Region which could impact your work motivation?
 - a. Which are those?
- 2. Could you tell me if you utilize (x, y, z) policy?
 - a. Why?
 - b. Why not?
- 3. Could you please tell me what does your supervisor do to impact work motivation at your job

- 4. Do you think agency leadership is focused on work motivation?
 - a. Why?
 - b. Why not?
- 5. Could you tell me what could the agency do to impact your work motivation?
- 6. Are you aware of policies at other agencies which you would like to see implemented here?
 - a. Which ones?
 - b. Where are these policies currently implemented?
- 7. Do you think Regional leadership is focused on work motivation?
 - a. Why?
 - b. Why not?
- 8. Do you think your supervisor is focused on work motivation of his/her employees?
 - a. Why?
 - b. Why not?
- P.I.: Thank you for your time today. If you have any further questions, you may call me or email me.

APPENDIX D

Informed Consent

Purpose of the Research

The purpose of this study is to assess the relative importance of middle management as a factor in employee satisfaction and commitment. Employee satisfaction and work commitment have been and remain an interest of both public and private employers, as satisfaction and commitment have been shown to impact retention of current employees as well as recruitment of new employees. Researchers have attempted to assess how work motivation is impacted by workplace culture, outside influences, leadership action, agency policies and programs. This study will assess how middle management interventions in public bureaus can impact work motivation. Previous research has not studied how middle management interventions can impact work motivation in a federal agency and this research will add a previously unknown dimension to the literature.

Procedures Involved in the Research

Your position has been identified as one that would provide valuable insight into organizational interventions regarding work motivation. The information contained in this informed consent is intended to share information regarding this study so that you may or may not choose to participate in the interview(s).

Alternatives available should a subject decide not to participate in the research

If you choose not to participate in the research, the investigator would appreciate a referral to another person of like experience. If you decline consent, you will not be contacted again, although you are free to contact the investigator should you change your mind about participation.

All foreseeable risks and discomforts

It is not anticipated that this research will involve any risks to the subjects of the research. The questions relate to agency leadership actions, agency policy, agency programs, regional leadership actions, regional policy, regional programs, and middle management interventions relating to work motivation. Interviews may be inconvenient to subjects, but all care will be made to ensure the minimum of inconvenience to subjects, including all long-distance charges related to the interviews will be paid by the investigators.

Benefits of the research

Work motivation in the public sector is an ongoing topic for public administration researchers. With the advent of the "Best Places to Work in the Federal Government" index scores by the Partnership for Public Service, agencies may be under additional outside pressure to respond to low index score ratings. Insights into middle management interventions regarding work motivation can only be fully explored with the participation of those who participated in the process, as well as the documents, reports and historical information based on that time. This research will benefit the research of public administration, organizational change, and work motivation literature.

Length of time subject is expected to participate

The interviews will take approximately one (1) hour, via telephone or in person at your agency. The investigator will telephone or visit the participants to ensure no cost to the participants and the interviews times will be set according to the schedules of the participants to ensure minimal disruption. If follow-up telephone interviews are needed, the time of interview and length thereof will be negotiated with the participant in advance and should take no more than two (2) additional hours.

Payment for participation

There is no payment for participation in this study.

Person to contact for questions regarding this study

Aleea L. Perry, University of Illinois at Chicago, CUPPA, 412 S. Peoria, M/C 278, Chicago, IL 60607. Phone: 317-908-9868. Email: aperry22@uic.edu

Participation is Voluntary and Right to Confidentiality and Right to Withdraw

Participation in this study is voluntary and the refusal to participate will not result in any consequences or any loss of benefits that the participant is entitled to receive. The participants in this study have a right to confidentiality and have a right to withdraw from this study at any time without any consequences.

If you agree to participate in this study, please provide the information below. If you have any further questions regarding this study, please contact Aleea Perry at the contact information above.

Name (printed)	Date
Signature	_
Address, City, State, Zip	
Phone Number	

APPENDIX E

List of Documents Received

Document	Document Name	Topic
Number		
1	Subagency Report	FEVS report for Region
2	Survey Results	Employee recognition survey
3	Midyear review survey	Survey results from employee mid-year reviews
4	Work-life Report	Discussion of work-life benefits for region
5	Health and Wellness Survey	Discussion of health & wellness survey results for region
6	Diversity newsletter	Discussion of diversity programming for region
7	Email to Region, a	Discussion of 2014 FEVS results to region
8	Email to Region, b	Discussion of 2014 FEVS results to region & call for action
9	Email to Region, c	Communication regarding employment opportunities in region
10	Email to Region, d	'Thank you' to staff for project completed.
11	Email to Region, e	Communication regarding FY 16 budget, hiring, surplus, investments in work
		environment, and workplace survey on work environment
12	Email to Region, f	Request for feedback on end of year performance evaluations
13	Email to Region, g	Request for feedback on mid-year performance evaluations
14	Email to Region, h	Communication regarding internal labor-management study results
15	Email to Region, i	Communication regarding internal labor-management study report
16	Email to Region, j	Communication regarding regional diversity efforts
17	Email to Region, k	Example of weekly communication regarding work environment
		improvements
18	Email to Region, l	Communication regarding mid-year evaluations feedback
19	Email to Region, m	Follow-up on regional FEVS team re: communication and evaluations
20	Email to Region, n	Communication regarding regional FEVS team work re: promotions,
		training, rewards, and recognition
21	Email to Region, o	Communication on mid-year performance evaluations and expectations
22	Email to Region, p	Communication to regional EVS team on 2014 FEVS report & thanking them for participating in regional EVS team
23	Email to Region, q	Communication to region regarding EPA budget (FY 2016)
24	Greenspark Challenge	Communication to region about Greenspark Challenge, an agency-based, regional initiative to improve health & wellness in the Region
25	Labor-Management Study	Report of Labor-Management study conducted in the region
26	Electronic newsletter (2/2014)	Communication regarding classification system, training opportunities, FEVS results, merit pay, telework, employee groups, and request for feedback
27	Email to Region, r	Communication regarding in-person meetings, information technology, training, strategic plan, and work environment.
28	FEVS Action Plan	Discussion of FEVS results and how region would address issues identified in FEVS
29	Regional Training Plan	Discussion of regional training plan, including dates, times, and types of training available in the region
30	Mid-year Appraisal Checklist: Employees	Discussion of how to conduct, what to cover, and other details on mid-year appraisals
31	Mid-year Appraisal Checklist: Supervisors	Discussion on how to conduct, what to cover, and other details on mid-year appraisals.

CITED LITERATURE

- Angle, H.L. & Perry, J.L. (1981). An empirical assessment of organizational commitment and organizational effectiveness. *Administrative Science Quarterly*, 27, 1-14.
- Balfour, D. L., & Wechsler, B. (1996). Organizational commitment: Antecedents and outcomes in public organizations. *Public Productivity & Management Review*, 256-277.
- Balogun, J. & Johnson, G. (2004). Organizational restructuring and middle manager Sensemaking. *Academy of Management Journal*, 47, 523-549.
- Bateman, T. S., & Strasser, S. (1984). A longitudinal analysis of the antecedents of organizational commitment. *Academy of management journal*, 27(1), 95-112.
- Best Places to Work in the Federal Government. (n.d.1). Frequently Asked Questions. Retrieved May 1, 2014 from www.bestplacestowork.org/BPTW/about/faqs.php.
- Best Places to Work in the Federal Government. (n.d.2) Best Places to Work Agency Rankings.

 Retrieved January 10, 2015 from

 http://bestplacestowork.org/BPTW/rankings/overall/large
- Blatter, J. & Haverland, M. (2012). *Designing Case Studies: Explanatory Approaches in Small-n Research*. New York: Palgrave Macmillan
- Blau, G., Merriman, K., Tatum, D. S., & Rudmann, S. V. (2001). Antecedents and consequences of basic versus career enrichment benefit satisfaction. *Journal of Organizational Behavior*, 22(6), 669-688.
- Congressional Record. (July 28, 2014). *United States International Communications Reform*Act of 2014 (H.R. 4490). Retrieved October 3, 2014 from

 www.congress.gov/congressional-record/2014/07/28/house-section/article/h6886-1

- Cook, J.D., Hepworth, S.J., Wall, T.D. & Warr, P.B. (1981). The experience of work: A compendium of 249 measures and their use. In Field, D.L. (Ed.). *Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis* (pp. 10). Thousand Oaks: Sage Publications.
- Creed, W. D., & Miles, R. E. (1996). Trust in organizations. *Trust in organizations: frontiers of theory and research*. Thousand Oaks, CA: Sage, 16-38.
- Currivan, D. B. (1999). The causal order of job satisfaction and organizational commitment in models of employee turnover. Human Resource Management Review, 9, 495-524.
- Dopson, S. & Stewart, R. (1990). What is happening to middle management. *British Journal of Management*, 1(1), 3-16.
- Dormann, C., & Zapf, D. (2001). Job satisfaction: a meta-analysis of stabilities. *Journal of Organizational Behavior*, 22(5), 483-504.
- Environmental Protection Agency. (n.d.1). Mailing Addresses and Phone Numbers. Retrieved

 October 3, 2014 from

 http://www2.epa.gov/aboutepa/mailing-addresses-and-phone-numbers#regional
- Environmental Protection Agency. (n.d.2) EPA Regions. Retrieved October 3, 2014 from http://www.epa.gov/tribal/whereyoulive/regions.htm
- Environmental Protection Agency. (October 23, 2014). *EPA Regional Office Workforce Levels FY03-FY2014*. FOIA Request.
- Eskildsen, J. K., & Nüssler, M. L. (2000). The managerial drivers of employee satisfaction and loyalty. *Total Quality Management*, 11(4-6), 581-588.
- Fenton-O'Creevy, M. (1998). Employee involvement and the middle manager: evidence from a survey of organizations. *Journal of Organizational Behavior*, 19(1), 67-84.

- Fernandez, S. (2008). Examining the effects of leadership behavior on employee perceptions of performance and job satisfaction. *Public Performance & Management Review*, 32(2), 175-205.
- Floyd, S.W. & Wooldridge, B. (1992). Middle management involvement in strategy and its Association with strategic type: A research note. *Strategic Management Journal*, 13, 153-167.
- Floyd, S.W. & Wooldridge, B. (1997). *The strategic middle manager: How to create and Sustain competitive advantage*. San Francisco: Jossey-Bass.
- Floyd, S.W. & Wooldridge, B. (Spring 1999). Knowledge creation and social networks in corporate entrepreneurship: The renewal of organizational capability. *Entrepreneurship Theory and Practice*, 123-143.
- Garvin, D.A. (1993). Building a Learning Organization. *Harvard Business Review*, 71(July/August), 78-91.
- George, A.L. & Bennett, A. 2005. *Case Studies and Theory Development in the Social Sciences*.

 Cambridge, MA: MIT Press.
- Giauque, D. (2015). Attitudes toward organizational change among public middle managers. *Public Personnel Management*, 44(1), 70-98.
- Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Science Quarterly*, 61-81.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal*, 49(2), 305-325.

- Howard, J. L., & Frink, D. D. (1996). The effects of organizational restructure on employee satisfaction. *Group & Organization Management*, 21(3), 278-303
- Hulin, C.L. (1991). Adaptation, persistence, and commitment in organizations. In M.D.
 Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational* psychology, vol. 2 (2nd ed.): 445-502. Palo Alto, CA: Consulting Psychologists
 Press.
- Joo, B. K., & Park, S. (2010). Career satisfaction, organizational commitment, and turnover intention: The effects of goal orientation, organizational learning culture and developmental feedback. *Leadership & Organization Development Journal*, 31(6), 482 500.
- Kanter, R. M. (1981). The middle manager as innovator. *Harvard business review*, 60(4), 95 105.
- Kim, S. (2002). Participative management and job satisfaction: Lessons for management leadership. *Public administration review*, 62(2), 231-241.
- Kinnie, N., Hutchinson, S., Purcell, J., Rayton, B. & Swart, J. (2005). Satisfaction with HR practices and commitment to the organisation: Why one size does not fit all. Human Resouce Management Journal, 15(4), 9-29.
- Knies, E., & Leisink, P. (2014). Linking people management and extra-role behaviour: results of a longitudinal study. *Human Resource Management Journal*, 24(1), 57-76.
- Likert, R. (1961). New Patterns of Management. New York: McGraw-Hill.
- Locke, E. A. (1969). What is job satisfaction?. *Organizational behavior and human performance*, 4(4), 309-336.

- Lynn, D.B. (2001). Succession Management Strategies in Public Sector Organizations Building Leadership Capital. *Review of Public Personnel Administration*, 21(2), 114-132.
- Madlock, P. E. (2008). The link between leadership style, communicator competence, and employee satisfaction. *Journal of Business Communication*, 45(1), 61-78.
- March, J. G., & Simon, H. A. (1958). Organizations.
- Marsh, R. M., & Mannari, H. (1977). Organizational commitment and turnover: A prediction study. *Administrative Science Quarterly*, 57-75.
- Maxwell, J.A. (2008). Designing a qualitative study. In L. Bickman & D.J. Rogs, Eds. *The SAGE handbook of applied social research methods*, 2nd Ed., 214-253. Thousand Oaks, CA: SAGE.
- McGurk, P. (2009). Developing the "middle leaders" in the public services? The realities of management and leadership development for public managers. *International Journal of Public Sector Management*, 22(6), 464-477.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, *1*(1), 61-89
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, 61(1), 20-52.
- Miles, M.B., Huberman, A.M. & Saldaña, J. (2014). Qualitative Data Analysis: A Methods Sourcebook, Edition 3. Thousand Oaks, CA: SAGE Publications, Inc.
- Mowday, R.T., Steers, R. & Porter, L.W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247

- Moynihan, D. P., & Pandey, S. K. (2007). Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society*, *39*(7), 803-832.
- Newell, E. (2010). The Happiness Factor. Government Executive, 42(13), 53-54.
- Nyhan, R. C. (1999). Increasing Affective Organizational Commitment in Public Organizations

 The Key Role of Interpersonal Trust. *Review of Public Personnel Administration*, 19(3),
 58-70.
- Office of Personnel Management. (n.d.1). Data, Analysis & Documentation. Retrieved on February 11, 2015 from http://www.opm.gov/policy-data-oversight/data-analysis-documentation/employee-surveys/
- Office of Personnel Management. (n.d.2). What is the FedView Survey? Retrieved on January 15, 2016 from http://www.fedview.opm.gov/2015/What/
- Office of Personnel Management. (n.d.3). Governmentwide Weighted Results. Retrieved on January 15, 2016 from http://www.fedview.opm.gov/2015/Reports/YrlySrvyItms.asp?AGY=ALL
- Office of Personnel Management. (n.d.4). Data, Analysis & Documentation Federal

 Employment Reports. Retrieved on May 8, 2016 from

 https://www.opm.gov/policy-data-oversight/data-analysis-documentation/federal

 employment-reports/historical-tables/total-government-employment-since-1962/

Office of Personnel Management. (2015). Federal Employee Viewpoint Survey Results

Employees Influencing Change. Governmentwide Management Report. Retrieved on

January 15, 2016 from

https://www.fedview.opm.gov/2015FILES/2015_FEVS_Gwide_Final_Report.PDF

- Office of Personnel Management. (January 2016). Environmental Protection Agency

 Data Extract and Codebook, 2010-2015. FOIA Request.
- Partnership for Public Service. (n.d.) The Best Places to Work in the Federal Government® 2013

 Rankings. Retrieved November 4, 2014 from

 http://bestplacestowork.org/BPTW/rankings/governmentwide
- Partnership for Public Service and Deloitte. (2013). Ten Years of the Best Places to Work in the

 Federal Government Rankings®: How Six Federal Agencies Improved Employee

 Satisfaction and Commitment. Retrieved on September 21, 2014 from

 http://www.bestplacestowork.org/BPTW/assets/BestPlacestoWork13 CaseStudiesReport

 .pdf
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of applied psychology*, 59(5), 603.
- Saltzstein, A. L., Ting, Y., & Saltzstein, G. H. (2001). Work-family balance and job satisfaction:

 The impact of family-friendly policies on attitudes of federal government employees. *Public administration review*, 61(4), 452-467.
- Scandura, T.A. & Lankau, M.J. (1996). Relationships of gender, family responsibility and flexible work hours to organizational commitment and job satisfaction. *Journal of Organizational Behavior*, 18, 377-391.

- Shi, W., Markoczy, L, & Dess, G.G. (2009). The Role of Middle Management in the Strategy Process: Group Affiliation, Structural Holes, and Tertius Iungens. *Journal of Management*, 35, 1453-1480.
- Taylor, J. C., & Bowers, D. G. (1974). The survey of organizations: toward a machine scored, standardized questionnaire. *Ann Arbpor: University of Michigan, Institute for Social Research*.
- The Best and Worst Places to Work in the Federal Government: Hearings before the Committee on Oversight and Government Reform, Subcommittee on Government Operations, House, 114th Cong. 1 (2016).
- Ting, Y. (1997). Determinants of job satisfaction of federal government employees. Public Personnel Management, 26(3), 313-334.
- Tsui, A.S., Egan, T.D. & O'Reilly, C.A., III. (1992). Being different: Relational demography and organizational attachment. In Field, D.L. (Ed.). *Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis* (pp. 16). Thousand Oaks: Sage Publications.
- U.S. Government Accountability Office. (2014). FEDERAL WORKFORCE: Recent Trends in Federal Civilian Employment and Compensation. Retrieved April 1, 2016 from http://www.gao.gov/products/GAO-14-215
- U.S. Merit Systems Protection Board. (2009). Managing for Engagement Communication,
 Connection, and Courage. Retrieved April 1, 2016 from
 http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=437591&version=438697&application=ACROBAT

- U.S. Merit Systems Protection Board. (2012). Federal Employee Engagement: The Motivating

 Potential of Job Characteristics and Rewards. Retrieved April 1, 2016 from

 http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=1256567&version=126160

 &application=ACROBAT
- Uyterhoeven, H. (1989). General managers in the middle. *Harvard Business Review*, 67(5), 136 145.
- Williams, L. J., & Hazer, J. T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: A reanalysis using latent variable structural equation methods. *Journal of applied psychology*, 71(2), 219.
- Wright, B. E. (2001). Public-sector work motivation: A review of the current literature and a revised conceptual model. *Journal of public administration research and theory*, 11(4), 559-586.
- Wright, B. E., & Davis, B. S. (2003). Job Satisfaction in the Public Sector the Role of the Work Environment. *The American Review of Public Administration*, *33*(1), 70-9.
- Wynen, J., Verhoest, K, & Rübecksen, K. (2014). Decentralization in Public Sector Organizations. *Public Performance & Management Review*, 37(3), 496-520.
- Yin, R.K. (2009). Case Study Research Design and Methods, Fourth Edition. Thousand Oaks, CA: Sage, Inc.

VITA

NAME: Aleea Perry

EDUCATION: PhD, Public Administration, University of Illinois at Chicago, Chicago,

Illinois, 2016

M.P.A., public management, Indiana University, Indianapolis, Indiana,

1999

B.A., political science, Butler University, Indianapolis, Indiana, 1996

A.A., Cottey College, Nevada, Missouri, 1994

TEACHING: Department of Public Administration, University of Illinois at Chicago,

Chicago, Illinois: Urban Government II: Managing the External

Environment, 2012.

Department of Leadership and Public Service, Adler University, Chicago,

Illinois: Public Budgeting and Finance, 2015.

Department of Leadership and Public Service, Adler University, Chicago,

Illinois: Qualitative Research Methods, 2015.

Department of Leadership and Public Service, Adler University, Chicago,

Illinois: Organizational Theory, 2016.

Department of Leadership and Public Service, Adler University, Chicago,

Illinois: Public Budgeting and Finance, 2016.

PROFESSIONAL Midwest Political Science Association

MEMBERSHIPS: American Society for Public Administration

PUBLICATIONS: Bergerson, P.J., Banyan, M., Skalecki, A., & Perry, A. (2016). Bipartisan

Campaign Reform Act and Citizens United v. FEC (2002, 2010). In R. Dewhirst (Ed.), *Government at Work: Policymaking in the Twenty-First*

Century Congress. Lanham, MD: Lexington Books.

Perry, A. (2015). The Impact of Legal Decisions on County Clerk

Operations. PA Times, 1(1), 27.