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Pepperdine University

Graduate School of Education and Psychology

A DESCRIPTIVE STUDY OF THE KEY LEADERSHIP CHARACTERISTICS OF
MID-LEVEL MANAGERS IN THE BUSINESS DIVISIONS AT A FEDERALLY
FUNDED RESEARCH AND DEVELOPMENT CENTER (FFRDC)

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Kevin Michael Caporicci

October, 2013

Jack McManus, Ph.D. – Dissertation Chairperson

This dissertation, written by

Kevin Michael Caporicci

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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TABLE OF CONTENTS

	Page
DEDICATION	vii
ACKNOWLEDGEMENTS	viii
VITA.....	ix
ABSTRACT.....	x
Chapter 1. Introduction.....	1
Chapter Structure.....	6
Background	6
Problem Statement.....	8
Purpose of the Study.....	8
Research Question	9
Significance of the Study	9
Limitations of the Study.....	10
Key Assumption	11
Definition of Key Terms.....	11
Chapter Summary.....	12
Chapter 2. Literature Review	13
Chapter Structure.....	14
History of FFRDCs.....	15
Leadership Issues at FFRDCs	20
Need for Leadership Programs.....	21
Transformational Leadership	24
Trait Theory	26
Style Theory.....	30
Situational Leadership Theory	36
Contingency Leadership Theory	41
Transactional Leadership Theory	44
Leader-Member Exchange Theory of Leadership.....	45
Proficient Leadership Model.....	50
Developing Candidates for Key Leadership Positions	53
Coaching and Mentoring.....	54
Reinvigorating the FFRDCs.....	55
Senior Executive Service (SES).....	56
Chapter Summary.....	60

	Page
Chapter 3. Methodology	61
Chapter Structure.....	61
Nature and Design of the Study	61
Purpose.....	63
Research Question	63
Sources of Data	63
Protection of Human Subjects.....	64
Data Collection Strategies.....	66
Participants.....	67
Instruments.....	68
Interview Process.....	74
Verifiability (Validity)/Reliability.....	74
Instrument Validity and Panel of Experts.....	75
Issues Related to the Researcher	77
Role of the Researcher	77
Statement of the Researcher Bias	77
Analytical Technique.....	77
Data Reduction	78
Data Display.....	78
Chapter Summary	78
Chapter 4. Results	80
Restatement of the Purpose of the Study	80
Review of Data Collection Process	80
LEAD-Self Findings.....	82
Leadership Style	82
Leadership Style Range	87
Leadership Style Adaptability.....	89
Follow-up Interview Findings.....	92
Interview Question 1.....	93
Interview Question 2.....	93
Interview Question 3.....	94
Interview Question 4.....	94
Summary of Interviews.....	94
Summary of the Research Question	95
Chapter Summary	96

	Page
Chapter 5. Discussion	97
Summary of the Research	97
Review of Research Findings.....	98
Summary of the Research Question	101
Recommendations for Further Research.....	102
Chapter Summary	103
REFERENCES.....	104
APPENDIX A. Human Participant Protections Completion Certificate.....	114
APPENDIX B. Informed Consent Forms (Survey and Interview)	116
APPENDIX C. Interview Protocol.....	119
APPENDIX D. Expert Panel Letter	121
APPENDIX E. Expert Panel Review Form.....	123
APPENDIX F. LEAD-Self Instrument	125
APPENDIX G. Business Division Organization	131
APPENDIX H. Human Resources Approval to Survey/Interview	133

LIST OF TABLES

	Page
Table 1. Two Examples of the LEAD Situational Items	70
Table 2. LEAD-Self Scoring Summary Example	85
Table 3. Primary Leadership Styles.....	85
Table 4. Frequency Statistics for Secondary Leadership Styles	86
Table 5. Leadership Style Range.....	88
Table 6. Flexible Leadership Behavior.....	88
Table 7. Leadership Style Adaptability	90
Table 8. Leadership Style/Performance Readiness Matrix.....	90
Table 9. Frequency Statistics for Primary Leadership Styles	95
Table 10. Frequency Statistics for Secondary Leadership Styles	95
Table 11. Flexible Leadership Behavior.....	99
Table 12. Leadership Style Adaptability	100
Table 13. Leadership Style/Performance Readiness Matrix.....	101

LIST OF FIGURES

	Page
Figure 1. Traditional and emerging traits	27
Figure 2. Five levels of leadership	29
Figure 3. The managerial grid	32
Figure 4. Combinations of leadership factors	32
Figure 5. The table of organizational and performance characteristics of different management systems	34
Figure 6. The managerial grid	35
Figure 7. Situational Leadership II Model	40
Figure 8. Leader-member relations, task structure and position of power	42
Figure 9. The Proficient Leadership Model	51
Figure 10. The LEAD scoring grid for the leadership style selection	71
Figure 11. Leadership style profile	72
Figure 12. The LEAD leadership style adaptability scoring grid	73
Figure 13. LEAD Self Survey Summary	83

DEDICATION

I dedicate this dissertation to my family, Laura, Matteo and Elena, who put up with the seemingly endless hours required to complete this degree.

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There were many individuals that helped contribute to the completion of this program. First, I'd like to thank my wife Laura. Her encouragement allowed me to take this degree to completion, especially through the rough patches. I want to thank my son Matteo and my daughter Elena, since they lost some quality time with their father ever since I committed to this program. A special thanks to Dr. Romejko for his council and wisdom through this massive effort. I want to thank Dr. Castellanos for making this a better paper. Of course, I want to acknowledge my chair, Dr. McManus for his consistent effort in guiding me through the dissertation. I also want to thank my parents and my brothers for constantly pushing me to complete the program.

VITA

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ABSTRACT

Leadership sets the tone and determines and shapes the organization. The more proficient individuals are in leadership and management skills, the more the organizations will thrive. Technical challenges have and will always be barriers, but competent leadership will always resolve those barriers. There are leaders of organizations who revel in success and those that perish in futility. What is the difference? Is it the organizational structure? Could it be luck? Throughout history there are individuals who have been praised for their leadership abilities. What can we learn from them?

The purpose of this study was to determine the key leadership characteristics of mid-level managers in the business divisions at a Federally Funded Research and Development (FFRDC). FFRDC organizations, as non-profits, have different leadership challenges from those of for-profit organizations.

Managers need to utilize and adapt to changes that provide us with better understanding the generational gaps in organizations considering the particular strengths and weaknesses of individual skill sets and the global impacts of international finance. Leadership skills from prior generations may not provide the necessary dynamics and flexibility that is needed in today's business environment.

History also has proof of poor leadership ability that has condemned countless organizations. What are the differences? Additionally, we must factor in the inevitable change variable since organizations are moving targets, constantly evolving based on the ever-changing technology, workforce and global business landscape. What may have been considered a successful leadership style 50 years ago may not be considered successful in today's world. However, there are constants that withstand the test of time.

The findings suggest that the majority of managers have leadership styles, flexibility range, and adaptability level appropriate to become effective leaders within FFRDCs.

Chapter 1. Introduction

“Defining leadership has been a complex and elusive problem largely because the nature of leadership itself is complex” (Daft, 2010, p. 4). Obviously, non-profit organizations have an alternate purpose and operate differently than profit making organizations. There may be commonalities within the structure or culture of profit and non-profit organizations, but the purpose and goals are quite different. According to Smith & Cooper (1994), whatever the problems of definition, whatever the complexities of theories, leadership is an important contributor to organizational success (p. 3). Many people would agree that leadership sets the tone for the direction of an organization.

Federally Funded Research and Development Centers (FFRDCs) make most of their decisions based on what direction the sponsors wish to pursue, therefore strategic decisions are not solely made at the FFRDC organization. No organization is immune to change, and the organizations that are flexible and adapt rapidly and easily tend to thrive in today’s world. With that said, the problem is the ever-changing business environment which calls leadership skills to be more harmonious with the organization’s mission. According to Myers (2004), “In today’s ever evolving business world we have never been more connected by information technology or the availability of information. Since this time there has been increased discussion for the UK non-profit sector in terms of skills development and leadership for future” (p. 639). With the global presence, advances in technology and a more demanding workforce, the pressures on senior leaders is more intense from the perspective of doing more with fewer resources. According to Drucker (2008),

During the years since the 1930s, every developed country has become a society of institutions. Every major social task—whether economic performance or health care, education or the protection of the environment, the pursuit of new knowledge or defense—is today being entrusted to organizations, designed for long life and managed by their own managements. On the performance of these institutions, the performance of modern society—if not the very survival of its members—increasingly depends. The performance and the survival of the institution depend on the performance of management. (p. 21)

Corporate change is constant, based on necessity to be competitive and satisfy shareholders. The increasingly competitive environment has forced traditional non-profit organizations to place great emphasis on innovation in all their social value creating activities (Kong, 2010, p. 160). Non-Profit organizations feel change in a different way, yet it does not go unnoticed. Lyons (2001) says, “The role of traditional non-profit organizations is widely recognized as the organizations’ activities influence almost every imaginable human need or interest in society (p. xi). With 90,000 new nonprofit organizations started in the United States each year, and the booming number of new businesses and nonprofit organizations starting in the U.S. in Latin America, and in those countries that were formerly part of the Soviet Union, many of which are being started by women taking their first steps into the worlds of entrepreneurship and leadership, there are simply many more positions of leadership today than there were just 5 years ago, and there will be many more created over the next decade and beyond (Rubenstein, 2005, p. 249). Governmental Agencies must also withstand change, however, they inevitably lag in the ability to implement rapid change. One could also argue that by creating a culture that assesses their status on a regular basis and is willing to divest itself of outdated knowledge is more willing to accept change (Kong, 2010, p. 170). FFRDC organizations serve an alternate purpose, which is to compliment or supplement the government in

bettering humanity or a particular group of people. It is clear that all organizations experience change and every organization is impacted by its leadership decisions.

Drucker States “Indeed, there is a management boom going on among the non-profit institutions, large and small. Yet little is specifically designed for the non-profit institutions to help them with their leadership and management” (Drucker, 2010, p. 6).

It is commonly accepted that leadership is not necessarily a trait that individuals are born with, but an acquired skill. As stated by Cohen (1998), “...my research shows conclusively that effectiveness as a leader depends less on some innate trait you are born with, and much more on specific principles that anyone can follow” (p. 1). With that said, there are a variety of methods individual leaders could utilize to develop into a more proficient leader, such as, leadership training, schooling, succession planning, mentoring, coaching, leadership literature, etc. There are specific organizations that are widely known to focus on leadership training for executives and managers, such as, The Center for Creative Leadership. “Every leader and organization faces obstacles that are difficult to surmount – from corporate executives confronting the complex global marketplace to educators trying to lift student achievement to nonprofit groups and government agencies addressing critical social issues with tight budgets” (Center for Creative Leadership, 2012, p. 1).

Some organizations align a high potential manager with an experienced executive to hone their skills toward a strategic succession plan. With the wide array of leadership concepts and prescriptive theories coming to the fore has come a general consensus that leadership – whatever its specific components may be – is distinct from management (Mannarelli, 2006). Additionally, corporate coaches advise executives through various

situations while providing an independent point of view. Many organizations have a goal to develop future leaders by building appropriate skills in order to assist the organization in maintaining continuity as leadership transition takes place. Many organizations build executive training programs, like the Boeing Company, which has a dedicated facility, called the Boeing Leadership Center, staffed with skilled executive coaches and training curricula. “Boeing invests \$150 million in internal learning programs and \$82 million in tuition reimbursement annually at preferred schools and in areas of study strategic to our business” (The Boeing Corporation, 2012, p. 1). For some organizations there are the more traditional means of developing managers by making use of universities skilled at teaching leadership and management.

A public or private university has the infrastructure, expertise and availability to support organizational needs in employee development. A Master in Business Administration (MBA) program at a public or private university outlines the foundation of mainstream literature on management and leadership. Additionally, many universities such as Harvard, have world class faculty along with a journal, the Harvard Business Review, which publishes many articles by professors and experts on the subject of leadership. With all the available resources on leadership, utilizing the proven leadership models would assist most organizations. Organizations often perform more efficiently and effectively if they understand what knowledge they possess and how to configure their intellectual resources to create organizational value (Marr, 2005).

As stated by Lansford, M., Clements, V., Falzon, T., Aish, D., & Rodgers, R. (2010), “A common theme across leadership theory development has been motivation on the part of theorists to ascertain whether there is truly a formula or set of skills that could

be emulated to mold successful leaders” (p. 51). While there are numerous commonalities and time tested models in the published literature on what leadership characteristics are most effective for organizations, there are reasons why some methods may work in one organization and fail in another. Managers believe to motivate their employees well, so to achieve organizational goals and to make their organization more effective (Siddique, Aslam, Khan, & Fatima, 2011).

The culture of Google is most likely not similar to that of PriceWaterhouse Coopers. Additionally, the culture of a non-profit varies from a profit based organization. For non-profits, social purposes are typically defined by their legal charters and by actions of their boards of directors (Davis, Kee, & Newcomer, 2010). Understanding the culture of an organization plays a role in understanding the leadership characteristics within that organization.

“Behavioural scientists have attempted to discover what traits, abilities, behaviours, sources of power, or aspects of the situation determine how well a leaders is able to influence followers and accomplish group objectives” (Aronson, 2001, p. 245). This descriptive study will study the current leadership characteristics of mid-level managers within the business divisions, such as procurement, finance, accounting and logistics, at a Federally Funded Research and Development Center (FFRDC). The rationale for choosing this topic is that leadership is an essential element in guiding any organization, therefore, understanding the current leadership characteristics, may assist in developing the future leaders. The work being performed at FFRDCs is critical for the government to stay on the cutting edge of technological and scientific discoveries. In order to achieve and strive for technological superiority as a nation, strong leadership is

required within the FFRDC communities. Determining the current leadership characteristics was the first step in developing a plan for the future. Once the leadership characteristics were identified, the foundation will have been set to further study how those characteristics provide direct inputs into a long-term strategic plan.

Chapter Structure

This chapter outlined the background of leadership, within an FFRDC, delving into the small amount of leadership characteristics information that was available. This chapter also described the problem statement laying the foundation for the study. The purpose of the study was to define the leadership characteristics of the mid-level management team within the business divisions at an FFRDC. Next, this chapter covers the research questions, significance of the study, limitations and assumptions of the study. Finally, key terminology was defined along with a conclusion of the chapter.

Background

FFRDCs have a long history which began in the 1940s by the Federal Government. FFRDCs are nonprofit entities sponsored and funded by the U.S. government to meet a specific long-term research or development need. Government agencies have decided to establish long-term relationships with their FFRDCs in order to provide continuity for research programs. FFRDCs operate in the industries of defense, homeland security, energy, aviation, space, health and human services, and tax administration (Defense Acquisition University, 2011). Generally, FFRDCs are operated and managed by a university or a consortium of universities. Some are operated by nonprofit organizations, or an industrial partner. FFRDCs do not have a prescribed organizational structure. They can be structured around traditional contractor-

owned/contractor-operated relationships, government sponsored private organizations, or government-owned/contractor-operated relationships or can reflect various balances of contractor/government control and ownership. The FFRDC identified for this study is approximately 75% NASA funded and 25% other Government Agency funded.

Many successful research projects have emerged from the FFRDC community. The government develops tasks through the charter for the FFRDC. The FFRDC proposes the cost of the government project and if agreed upon by the government, begins to work on the project. One key element relating to the FFRDC charter, is that they will not compete with industry for work. The business organization within the FFRDC is an important partner in developing these cost estimates along with managing the finances, procurements, facilities, IT infrastructure and regulations of the organization. With the criticality of assisting the government in times of need, the more efficient an FFRDC runs its business activities, the greater benefit there is to the government.

Additionally, the charter of the FFRDC is technical invention or innovation, not on developing strong leadership, especially in the business divisions; however, no organization can be successful without strong leadership. The Department of Defense (DOD) has specialized training programs, such as, the Defense Acquisition University (DAU) that has a very detailed curriculum to develop contracting officers. There are DAU certifications that go along with the curriculum so when positions open there are education requirements tied to the level of the position. There are additional programs for upper management called Senior Executive Service program. This program has a detailed

agenda in order to properly train individuals to fulfill executive roles. These are examples of programs that exist in the government but don't exist in the FFRDC world.

The benefits of having the above training classes and certifications could greatly assist the workforce. If further certifications meant merit increases or promotions, then the workforce would have a known career path. Additionally, if there was a succession planning program then workers would be training and preparing for their future job. This would also assist the organization in workforce planning for the future. Without these programs, FFRDCs scramble to make decisions or develop work around processes that band aid the issue.

Developing these types of programs would be critical for FFRDCs to have consistent leadership. Determining the characteristics with the current management team at an FFRDC will lay the groundwork for future studies that could identify individuals with leadership potential and provide the proper environment for training, individual development plans, mentoring, coaching, etc.

Problem Statement

The problem is that there are many studies defining characteristics of business management within the private sector, however, there is very little literature on the nature of leadership characteristics of FFRDCs. Additionally, there are no known studies that define key characteristics of mid-level business management within an FFRDC.

Purpose of the Study

Since there is very little published literature on the key leadership characteristics of business management within FFRDCs, the researcher would like to expand the knowledge in this area. The purpose of this study was to define the leadership

characteristics of mid-level management within the business divisions at an FFRDC. Expanding the knowledge of determining key leadership characteristics at an FFRDC will lay the foundation for further research studies at FFRDCs.

Research Question

The research proposed to determine the leadership characteristics of mid-level business management at an FFRDC. Therefore, the following research question will be explored:

1. What were the most prevalent leadership characteristics of mid-level management, within the business divisions, at an FFRDC?

Significance of the Study

The significance of this study was to determine current leadership characteristics of mid-level managers within an FFRDC business environment. “The field of strategic leadership, or the study of how top-level leaders influence organizational performance, has not yet been widely extended to the nonprofit sector” (Phipps & Burbach, 2010, p. 137). Most of the leadership material that has been published is geared toward profit making organizations, which leaves a gap in the FFRDC organizations leadership focus. FFRDC organizations have a different goal from industry or even governmental agencies. Therefore, the leadership characteristics may vary as well. Given the role of FFRDCs to serve the government and the governments needs have expanded to a more global environment over time, means that FFRDCs must consider more of a global mindset. Leaders must be able to adapt to the evolving landscape to best serve their organizations. To better define the current leadership characteristics this study will use proven leadership models for gathering data by survey/interviewing key personnel within the

business organizations of FFRDCs. Currently, little research has been completed to identify leadership characteristics within the business organizations of FFRDCs. Interviewing/surveying the mid-level management team will lay the foundation for gathering the leadership characteristics. The survey/interview tools can be found in Appendix G of this study. The information gathered could be used by executive management to determine key attributes for future leaders and lay the foundation for leadership training, succession planning and leadership programs. For example, management may use this information to develop leadership training, succession planning programs for the executives, promotion criteria, and possibly hiring criteria. Additionally, the information may develop the foundation for future studies which may assist in leadership selection, training, succession planning, coaching, mentoring, etc. Over the past 15 years, such research has found that only 12 to 33 % of nonprofits had established a formal executive succession plan or an emergency succession plan for that matter, one where the departure of the executive results from a unscheduled departure such as death in office (Santora, 2009, p. I). The researcher felt that the narrow focus of this study on just the business segments of the organization will provide a wealth of data to the other FFRDC organizations. Additionally, understanding the current leadership characteristics could provide consistency through leadership transitions with less interruption to the organization.

Limitations of the Study

The following were the limitations of the study:

- The study involved leadership characteristics in only one FFRDC; and
- The study only utilized the LEAD-Self Assessment tool.

Key Assumption

The following was a key assumption of the study:

- Assume that the responses will reflect the true feelings of the respondents.

Definition of Key Terms

The following terms were used throughout this dissertation, and the definitions below are consistently applied.

- *Federally Funded Research and Development Center (FFRDC)*. Activities that are sponsored under a broad charter by a Government agency (or agencies) for the purpose of performing, analyzing, integrating, supporting, and/or managing basic or applied research and/or development, and that receive 70 % or more of their financial support from the Government; and—
 - A long-term relationship is contemplated;
 - Most or all of the facilities are owned or funded by the Government; and
 - The FFRDC has access to Government and supplier data, employees, and facilities beyond that common in a normal contractual relationship (Acquisition.gov, 2012).
- *Not-For-Profit Organization*. Organization that has primary objectives such as public service rather than returning a profit to its owners (Kurtz & Boone, 2011, p. 5).
- *Mid-Level Managers*. Organizationally defined as supervisors and section managers that are responsible for managing people.

- *Business Division.* The business divisions include Finance, Accounting, Acquisition, Facilities, IT systems, Logistics, and Program Business Management. These divisions manage the business processes of an FFRDC.

Chapter Summary

As business evolves into a more global and complex environment, leaders are called on to be more adaptable than ever. Understanding how the business divisions at an FFRDC can best serve the technical organization in a way to simplify business matters and allowing the researchers to perform impressive science and engineering while protecting the organization by complying with laws and regulations is an ever evolving challenge. Leaders have more and more demands on them to find answers to more complex problems, while dealing with tremendous generational gaps in the current workforce. The proceeding chapters will describe leadership characteristics in detail that are the core of an FFRDC business organization.

Chapter 2. Literature Review

According to Papadimitriou (2007), “Similar to profit-making and public organizations, non-profit organizations are under continuous pressure to develop strategies and embrace management practices, which ensure organizational effectiveness” (p. 571). Leadership is the core of any organization, including both profit and non-profit organizations. “Current texts for for-profit and non-profit leaders all seem to use the findings from the for-profit sector leadership research as the basis for their prescriptions for effective leadership” (Thach & Thompson, 2007, p. 358). Without quality leaders guiding the organization, the probability of failure certainly increases. In order for organizations to build solid leadership, endure or facilitate change, prepare successors, there must be a strategic plan for developing these key competencies. Jackson, Farndale, and Kakabadse (2003) state, “We argue that organizational success depends on the top team and board members possessing an appropriate balance of skills, competencies and capabilities” (p. 186). Identifying key characteristics for successful leaders is the crux of building the future of the organization. The majority of the non-profit organizations are involved in service production, which aims at identifying, and satisfying socially defined needs and expectations (Papadimitriou, 2007).

One of the guiding principles of FFRDCs is to advance science and technology while completing programs for the sponsor. Many of these activities prove to be of national interest by the government as well as the public. Non-Profit organizations rely on public funding sources such as governmental agencies, private foundations and individuals (Heap, 1998). FFRDCs receive billions in federal funding by the U.S. Government. Certain responsibility comes along with that amount of money for these

agencies. Over the years, agencies have found it useful and advantageous to ask Congress to create, or authorize an agency to create, nonprofit organizations to perform functions that the agency itself finds difficult to integrate into its regular policy and financial processes (Moe, 2001). The government is relying on the responsibility of the FFRDC when spending taxpayer funds. The business units of these FFRDCs generally don't have leadership development training programs designed for the stewards of the taxpayer dollars. Many of these FFRDCs do support education with external organizations such as graduate degrees or even doctoral degrees at universities which cover, among other programs, business related topics and leadership. The only stipulation on these programs chosen is that they must coincide with the employee's current job and that the university is accredited. Many FFRDCs also support particular external training programs and professional certifications that relate to the employees work assignment. Is this enough leadership training for the FFRDC business management teams? What are the needs, expectations of those positions? Are there gaps in the organizational needs? Are there future positions that will be developed based on the changing/evolving environment? Once these questions are answered, then leadership programs and training should be discussed. Gaps should be assessed between the organizational goals or objectives versus the leadership abilities of the management team.

Chapter Structure

This chapter will provide a comprehensive literature overview of proven leadership theories, models and characteristics in executive management. The literature used in this chapter will not only be related to non-profit agencies, but will be a comprehensive summary of sources including proven mainstream leadership models.

First, an understanding of leadership characteristics that are determined by executive management to be core to the organization will provide the foundation that will build it into the strategic plan. Second, the agency must determine if there are individuals that naturally meet that criteria or have the potential to develop those skills. Finally, instilling these behaviors organizationally as part of the culture is the next goal of the agency. This is no easy task. Training toward incorporating new behaviors as core competencies will ingrain the criteria as the new culture.

History of FFRDCs

The FFRDC is a hybrid organization designed to meet a federal need through the use of private organizations (Moe, 2001). FFRDCs are non-profit organizations that are funded by a U.S. federal government agency. The idea of a FFRDC began in the 1940s based on the government needs during the war and are now prominent organizations that allow the United States government to fulfill other specific missions. They are exempt from most taxes, facilities and equipment are often owned or financed by the federal government, and they receive operating expenses without assuming business risks or costs associated with competing for most federal contracts. The following agencies have developed FFRDCs, Department of Defense (DOD), Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), Health and Human Services (HHS), Department of Homeland Security (DHS), Department of Transportation (DOT), Veterans Administration (VA), Nuclear Regulatory Commission (NRC), and the U. S. Department of the Treasury (TREASURY). For example, the DOD employs 10 FFRDCs that perform activities such as, technology development and communications that prepare United States (U.S.) fighters for winning

wars. The department of energy employs 16 FFRDCs that tackle issues of nuclear energy and technology development that assist the U.S. in more efficient infrastructure design and development, harnessing the power of nuclear energy. The National Science Foundation has five FFRDCs that perform a variety of tasks, such as, earth science and astronomy. These agencies utilize the talents of the FFRDCs for particular activities that support that agencies mission. FFRDCs are grouped into three categories focusing on different types of activities:

- System Engineering and Integration Centers
- Study and Analysis Centers
- Research and Development Centers (includes national laboratories)

(Defense Acquisition University, 2011)

Originally, FFRDCs were Federal Contract Research Centers (FCRCs), developed to assist the military, in World War II, to assist in research solutions for success in war. FFRDCs developed from FCRCs and are mostly managed by universities, a consortium of universities, non-profit organizations or public interest partnerships. Public interest partnerships are Government Owned and Contractor Operated (GOCO) partnerships and University Affiliated Research Centers (UARCs). FFRDC employees are not government employees; they are private employees of the organization managing the organization. The goal of the FFRDC is tied to the mission of the government agency sponsor. There is a link between the FFRDC and the government agency in how they share data in order to meet the sponsor requirements. Furthermore, obtaining organizational legitimacy and ensuring operational continuity in a non-profit setting precludes basic agreement on the mission statement and minimum satisfaction of the different interest parties participating

in the operation of the organizations (Papadimitriou, 2007). Some performed studies and analyses on topics such as anti-submarine warfare, but the majority were laboratories engaged in the development of radar, the proximity fuze, and other war-winning weapons including nuclear weapons (U.S. Congress, Office of Technology Assessment, 1995). The research was seen as critical in bridging gaps between science goals and military execution.

An FFRDC's performance of its tasks requires that a special relationship exist between the FFRDC and its sponsor. That relationship includes:

- Comprehensive knowledge of sponsor needs – mission, culture, expertise and institutional memory regarding issues of enduring concern to the sponsor
- Adaptability – ability to respond to emerging needs of their sponsors and anticipate future critical issues
- Objectivity – ability to produce thorough, independent analyses to address complex technical and analytical problems
- Freedom from conflicts of interest and dedication to the public interest – independence from commercial, shareholder, political, or other associations
- Long-term continuity – uninterrupted, consistent support based on a continuing relationship
- Broad access to sensitive government and commercial proprietary information – absence of institutional interests that could lead to misuse of information or cause contractor reluctance to provide such information

- Quick response capability – ability to offer short-term assistance to help sponsors meet urgent and high-priority requirements (Defense Acquisition University, 2011)

There are many benefits to the government in partnering with universities and other organizations to operate an FFRDC. The benefit of the FFRDC is that there is no profit motive or conflict of interest, and the FFRDC can therefore function as an independent, trusted advisor and honest broker. The FFRDC is answerable only to the government customer and has no vested interest in particular technologies or solutions (Defense Acquisition University, 2011).

FFRDCs operate differently than traditional corporations and even typical non-profit organizations. It is important to recognize that the FFRDC does not compete for federal contracts against non-FFRDCs, but may compete with other FFRDCs for contracts. The FFRDC is required to work within the purpose, mission, general scope, or competency as assigned by the sponsoring agency. The FFRDC must not perform work that is otherwise performed by a for profit corporation (Defense Acquisition University, 2011).

There is a master list of FFRDCs formally established in 1967 that is maintained by the NSF (2012). The National Science Foundation Act mandated the NSF to “provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources, and to provide a source of information for policy formulation by other agencies of the Federal Government” (p. 1). FAR 35.017-8 states that the NSF will maintain a master federal government list of FFRDCs (Defense Acquisition

University, 2011). As of 2011, there were 39 recognized FFRDCs working for the United States Government, according to the master list (National Science Foundation, 2012).

The charter or purpose of the FFRDC requires the sponsoring agencies to have a written agreement between the specific government agency and the FFRDC. FAR 35.017-1 describes the special relationship between FFRDCs and their sponsors. The FAR requires a written agreement of sponsorship between the government and an FFRDC and sets forth the federal policy regarding the establishment, use, review, and termination of FFRDCs. FFRDCs agree to terms and conditions more restrictive than those of other organizations that work with the federal government. The substance of the agreement is that FFRDCs not make a profit, not compete for federal work with industry, not work for commercial clients, not manufacture products, and not carry out functions performed by the DoD. Sponsors do not assign work that could be carried out effectively by for-profit companies except on a very limited basis to maintain expertise and continuity within their FFRDC (Defense Acquisition University, 2011).

A Sponsoring Agreement is unique to FFRDCs. It defines the work and describes the context in which that work is performed. A Sponsoring Agreement is clearly designated as such by the sponsor, may take various forms, and is written to facilitate the long-term, special relationship between the Government and an FFRDC. It:

- States the purpose and mission of the FFRDC
- Provides provisions for the orderly termination or nonrenewal of the agreement, disposal of assets, and settlement of liabilities
- Directs how retained earnings may be used

- Prohibits the FFRDC from competing against any non-FFRDC except to operate an FFRDC
- Determines whether or not an FFRDC can accept work from any organizations other than the sponsor(s) (Defense Acquisition University, 2011)

Leadership Issues at FFRDCs

FFRDCs have a different charter than government agencies or corporate entities. Some FFRDCs are tied to academia which could further complicate the leadership aspects based on the organizational structure. According to Siddique, Aslam, Khan, and Fatima (2011), “Academic leaders have more challenges than the leaders of business organizations” (p. 188). With that said, all non-profit organizations have unique leadership issues that oppose them from profit making organizations which have several challenges involving the development of leadership qualities. The first is called fieldwise: this is used in evaluating leadership programs by understanding and critiquing leadership for others. The second challenge is methodological as shown below:

- Engage multiple stakeholders
- Look for change in multiple arenas
- Use multiple methods
- Invest in longitudinal evaluation
- Develop a theory of change
- Acknowledge the complexity of change
- Consider context
- Participate in cross-program learning

The leadership challenge is to see the extent to which it is possible to construct/integrate a statement of organizational purpose that incorporates the visions of key stakeholders while addressing environmental opportunities, constraints and risks (Davis, et. al., 2010).

Need for Leadership Programs

Dynamic market conditions and advances in technology are set to affect the way development is tackled in the future, with a special emphasis on distance delivery as a means to accommodate the time constraints facing busy executives (Jackson et al., 2003). Training programs for upper management and future leaders is essential for the consistency of any organization. The idea behind executive development was, and still is, to provide advanced management training and education to mature, motivated and experienced managers. FFRDCs are no different. According to Rubenstein (2005), “The leadership revolution will put leadership development and training in the ‘emergency room’ of organizations, where it belongs, just as much as it belongs in the classrooms and the libraries of organizations and educational institutions” (p. 351). There are companies that specialize in leadership training and development which could be utilized in putting programs in place. Also, there are universities that have degree programs which address leadership and management curriculum. Both of these solutions may be too costly for an organization. Many organizations develop their own internal program that is customized to their organization. No matter which direction is chosen, leadership programs and curriculum are essential to developing leadership behaviors and characteristics for the betterment of the organization.

Leadership has evolved over time, including more specific training classes, degrees and schools, such as The Harvard Business School focusing their curriculum and publication on the art of leadership. Organizations are constantly revisiting the leadership methodology based on the changing generation of workforce and the specific dynamics of their organization. With the constant change in all organizations and their workforce, leaders need to keep their skills ahead of the organizational needs. Maxwell (2007) states, “To lead well, we must do 21 things well” (p. xx). According to Maxwell,

It’s still true that leadership is leadership, no matter where you go or what you do. Times change. Technology marches forward. Cultures differ from place to place. But the principles of leadership are constant – whether you’re looking at the citizens of ancient Greece, the Hebrews in the Old Testament, the armies of the modern world, the leaders in the international community, the pastors in local churches, or the businesspeople of today’s global economy. Leadership principles are unchanging and stand the test of time. (p. xxi)

There are many examples of what organizations and experts consider key leadership characteristics. Cultures differ from one organization to another and the attributes that are valued shift as well. The mission of the organization plays a role in the desired leadership styles. Additionally, change will drive the shift in leadership values. As stated by Rubenstein (2005), “we need a clearer emphasis on ethics, we need better communication skills, we need a stronger ability to work together and solve our problems” (p. 352).

Not all individuals have the capacity or ability to become leaders. For example, Maxwell (2007) states in the 21 Irrefutable Laws of Leadership, that the law of the lid determines a person’s level of effectiveness in leadership ability. Identifying potential in future leaders is also a key factor in providing the foundation, training and dedicating resources to developing individual leadership capabilities.

It is clear based on Maxwell's (2007) 21 Laws of Irrefutable Leadership that change and adaptability are major components of the equation. Not only is change inevitable, it is a necessary component of leadership. Organizations want to see benefit from their investment in developing the future leaders in their organization. Managers who show a sincere interest in the employee's future career, who provide feedback on strengths, who ensure work assignments are stretch-learning assignments, and who actively help align learning opportunities with the employee's interests all gain greater employee commitment (Wallace & Trinka, 2009).

Culture is another important aspect of determining what the key leadership characteristics are of an organization. In their study on corporate culture (Schwartz & Davis, 1981), found that having acquired an understanding of culture an organization might reduce the risk of failure. Schein (1999) mentioned that analysis of culture elicits from an organization's attempts to resolve fundamental problems or to develop new strategies. The culture will impact and may even dictate some aspects of the organizational leadership.

According to Jackson et al. (2003), in the past, and indeed today, some organizations were never convinced of the relevance of formal executive education. Instead, they preferred their executives to gain experience on-the-job through such methods as job rotation and project assignments, which they believed equipped them with enough knowledge of vital operations to prepare them for senior-level positions. Developing future leaders is a key component for any organization since they will become the leadership team. Identifying those individuals that have the talent to eventually lead the organization is a difficult challenge. How does an organization

determine who are the high potential candidates that will lead the organization in the future? Once identified is there a succession plan to prepare the employee? Is there a leadership program to further develop the candidate? Additionally, capturing the key leadership characteristics that the organization values are also critical elements for developing successful leaders.

Transformational Leadership

Transformational leadership is a newer concept that uses leadership buzzwords such as, *empowering* and *inspiring* your followers. Transformational leadership is a building process for long-term visions that incorporates responsibility into the meaning. “Transformational leaders inspire followers to achieve extraordinary outcomes by providing both meaning and understanding” (Boerner, Eisenbeiss, & Griesser, 2007, p. 16). Some of the key aspects of transformational leadership according to Northouse (2007) are emotions, values, ethics, standards and long-term goals and includes assessing followers’ motives, satisfying their needs, and treating them as full human beings. A key aspect of transformational leadership is the development of the followers by inspiring them in an ethical and value driven direction. Ethics pervades most topics and should be constantly represented in the materials (Brock, 2004).

Transformational leadership has been broken down into four factors, charisma, inspirational motivation, intellectual stimulation and individualized consideration according to Northouse (2007). Charisma is the first factor. Leaders that have a specific vision and a high ethical standard that followers subscribe to and wish to emulate would demonstrate charisma. Mannarelli (2006) describes charismatic leaders as having the ability to inculcate followers with a shared mission, which depends on exceptional

performance for success. Charismatic leaders have strong convictions, high self-confidence and a deep sense to dominate and influence others.

The second factor is inspirational motivation, which is a leader building a team through inspiration of a shared vision. “What is necessary for leaders, whether regarded as charismatic or transformational, is that they have a compelling vision and that they find a way to communicate it” (Mannarelli, 2006, p. 47).

The third factor is intellectual stimulation which is supportive leadership in challenging followers by innovation or problem solving. As stated by Masood, Dani, Burns, and Backhouse (2006), transformational leaders raise the consciousness of the followers with ideals, morals and values while not subscribing to negative emotions such as fear or greed.

Individualized consideration is the fourth factor. Leaders use this factor to develop their followers by coaching or mentoring them in reaching fulfillment. “In addition to providing inspirational motivation and intellectual stimulation, transformational leaders provide individualized consideration to followers, showing respect and dignity and serving as mentors” (Beugre, Acar, & Braun, 2006, p. 55).

To further demonstrate the importance of identifying or developing the key leadership characteristics in the organization is that the FFRDCs leadership is mostly only several years away from retirement. There will be large gaps on the leadership team if those leadership characteristics are not identified or developed prior to the current leadership team exit.

Trait Theory

Fundamental to the trait theory was the idea that some people are born with traits that make them natural leaders (Daft, 2010). Leadership styles emerge in many forms, and one style that surfaces from the inner core of a being is the trait approach theory of leadership. The trait approach theory of leadership developed as the greatness possessed by leaders was studied. Intrinsic qualities and characteristics streamlined the model leader in the early part of the 20th century. With such a profoundness being experienced in the results of leadership, this style was originally coined *great man* (Northouse, 2007). As the theory evolved, it was believed that specific personality traits were foundational to a leader's success. Throughout the 20th and 21st centuries, much research has been conducted surrounding the depth of the trait approach theory of leadership.

“Traits are considered to be patterns of individual attributes, such as skills, values, needs, and behaviors, which are relatively stable in the sense that they tend to repeat over time” (Strang, 2007, p. 431). The most common traits associated with this leadership style are: intelligence, self-confidence, determination, integrity, and sociability. Intelligent leaders bring strong verbal, perceptual, and reasoning abilities to the task; self-confident leaders believe in their own abilities to make a difference; determined leaders meet and even exceed their goals; leaders of integrity adhere to strong principles that create a safe and trusted environment during a task; and sociable leaders develop cooperative relationships. Although these traits may vary according to researchers, they seem to represent the major traits involved with trait approach leadership.

The following diagram (see Figure 1) categorizes traditional and emerging traits that were adapted by Strang (2007) from the contents of Katz and Kahn (1978), Stogdill (1974), and Yukl (1971, 1998).

Traditional effective leadership traits	Traditional effective leadership skills	Emergent effective leadership traits
Organized (also an administrative ability)	Ambitious, achievement oriented	Moderately high achievement orientation
Clever (intelligent)	Assertive	
Conceptually skilled	Decisive	
Knowledgeable about the work	Dominant (power motivation)	Internal locus of control
	Energetic (high activity levels)	High energy level
Socially skilled	Alert to social environment	Emotional maturity
Fluent in speaking (could also be technical skill)	Cooperative	Socialized power motivation
Diplomatic	Dependable	Personal integrity
Tactful	Self-confident	Self-confidence
	Adaptable to situations	
Creative	Tolerant of stress	Stress tolerance
Persuasive	Persistent	
	Willing to assume responsibility	Low need for affiliation

Figure 1. Traditional and emerging traits. Adapted from examining effective technology project leadership traits and behaviors by K. D. Strang, 2007, *Computers in Human Behavior*, 23, p. 425. Copyright 2007 by Elsevier. Adapted with permission.

Theoretically, these traits have been acknowledged as catalysts in *great* leadership. Because this theory of leadership is based upon personal traits, it is important to mention that not all leaders will possess all of these traits or even any of these traits. The idea stemming from this concept is simply that effective leaders have greatness in

their ability to influence a group of people towards achieving goals. That greatness is believed to be derived from traits.

There is little argument that great leaders have credible traits that lead to their success. Collins (2001) has studied the concept of greatness in leadership for many years. While conducting research Collins admits that his theory found him and he eventually developed what is the now well-known Level 5 Hierarchy of Leadership. Collins adamantly states:

But Level 5 found us. Over the course of the study, research teams kept saying, "We can't ignore the top executives even if we want to. There is something consistently unusual about them." I would push back, arguing, "The comparison companies also had leaders. So what's different here?" Back and forth the debate raged. Finally, as should always be the case, the data won. The executives at companies that went from good to great and sustained that performance for 15 years or more were all cut from the same cloth -- one remarkably different from that which produced executives at the comparison companies in our study. It didn't matter whether the company was in crisis or steady state, consumer or industrial, offering services or products. It didn't matter when the transition took place or how big the company. The successful organizations all had a Level 5 leader at the time of transition. (pp. 138-139)

According to Strang (2007), "The level 5 hierarchy model is an interesting description of a leadership taxonomy which somewhat parallels the leader trait/maturity concepts evident in transformational, charismatic, virtual reality leadership theories" (pp. 434-435). Collins' (2001) research indicates that traits are absolutely a proponent of great leadership. Figure 2 portrays the five levels of leadership that depict traits in leadership style that are credited to experiencing success in leadership.



Figure 2. Five levels of leadership. Reprinted from *Good to Great* (p. 20), by J. Collins, 2001, New York, NY: Harper Business. Copyright 2001 by Harper Business. Reprinted with permission.

By closely viewing this hierarchy of traits, the same list of common traits that many previous researchers have compiled can be paralleled. Level 1 necessitates intelligence, level 2 requires self-confidence, level three entails determination, and level 4 involves integrity and sociability. According to Collins (2001), “Level 5 leaders are a study in duality: modest and willful, shy and fearless. To grasp this concept, consider Abraham Lincoln, who never let his ego get in the way of his ambition to create an enduring great nation” (p. 140).

The trait approach leadership theory is effective because it explains leadership development in an energetic work environment, allows leaders to work from their strengths, identifies strengths that lead towards greatness, and is supported by more than 100 years of research. There are, however, some criticisms that dispute the effectiveness

of trait approach theory of leadership. Opponents of the trait approach theory of leadership argue that personality cannot explain leadership (Anderson, 2005). Anderson (2005) states, “Traits of leaders cannot explain organizational effectiveness. Management and leadership in formal organizations are not about possessing special traits. It is about acting” (p. 1078).

Contemporary research suggests that personality has no bearing on emergence in leadership. Even though Stogdill (1974) is quoted as claiming that leaders who have traits are not necessarily equipped for any leadership position, but that there are indicators that traits do work with other factors in leadership positions, Anderson (2005) still believes that it is a weak correlation to effective leadership. Furthermore, in 1969, Gibb (as cited in Anderson, 2005) concluded in his research that “there is no scientific basis for a relationship between traits and leading positions” (p. 1078). Yet, Gibb (1969) does mention that personality traits cannot be excluded from leadership positions. Additionally, this theory of leadership does not offer any type of training for leaders nor does the research accurately measure that a specific trait is indeed responsible for success.

In short, the trait approach is alive and well. It began with an emphasis on identifying the qualities of great persons; next, it shifted to include the impact of situations on leadership; and most currently, it has shifted back to reemphasize the critical role of traits in effective leadership (Northouse, 2007).

Style Theory

In the style approach to leadership the behavior of a leader is emphasized, thus separating it from the trait approach which focuses on characteristics. There are two

general behaviors recognized in the style approach which are task behavior and relationship behavior. Leaders who measure high on task behaviors are generally focused on helping followers accomplish goals, while relationship behaviors from leaders tend to make followers feel more comfortable with themselves, their colleagues, and their work situations. “The central purpose of the style approach is to explain how leaders combine these two kinds of behaviors to influence subordinates in their efforts to reach a goal” (Northouse, 2007, p. 65).

The most reputable research of style approach leadership is credited to Ohio State University (1940-1950), the University of Michigan (1950-1960), and Blake and Mouton (1964). The Ohio State studies developed their research around a questionnaire called the Leader Behavior Description Questionnaire (LDBQ; see Figure 3).

The survey considered two elements of leadership: initiating structure, which focused on task behavior, and consideration for workers, which focused on relationship behavior. Richards (2012) states “An important finding of the Ohio State studies was that these two dimensions are independent. This means that *consideration for workers* and *initiating structure* exist simultaneously and in different amounts” (Richards, 2012, p. 1). Figure 4 shows the various combinations and quantities of the factors.

Questionnaire: Below is a list of statements about leadership behavior. Read each one carefully, then, using the following scale, decide the extent to which it actually applies to you. For best results, answer as truthfully as possible.

never **sometimes** **always**
 0 1 2 3 4 5

1. _____ I encourage my team to participate when it comes decision making time and I try to implement their ideas and suggestions.
2. _____ Nothing is more important than accomplishing a goal or task.
3. _____ I closely monitor the schedule to ensure a task or project will be completed in time.
4. _____ I enjoy coaching people on new tasks and procedures.
5. _____ The more challenging a task is, the more I enjoy it.
6. _____ I encourage my employees to be creative about their job.
7. _____ When seeing a complex task through to completion, I ensure that every detail is accounted for.
8. _____ I find it easy to carry out several complicated tasks at the same time.
9. _____ I enjoy reading articles, books, and journals about training, leadership, and psychology; and then putting what I have read into action.
10. _____ When correcting mistakes, I do not worry about jeopardizing relationships.
11. _____ I manage my time very efficiently.
12. _____ I enjoy explaining the intricacies and details of a complex task or project to my employees.
13. _____ Breaking large projects into small manageable tasks is second nature to me.
14. _____ Nothing is more important than building a great team.
15. _____ I enjoy analyzing problems.
16. _____ I honor other people's boundaries.
17. _____ Counseling my employees to improve their performance or behavior is second nature to me.
18. _____ I enjoy reading articles, books, and trade journals about my profession; and then implementing the new procedures I have learned.

Figure 3. The managerial grid. Adapted from *The Managerial Grid* (p. 18), by R. Blake, 1964, Houston, TX: Gulf Publishing. Copyright 1964 by Gulf Publishing. Adapted with permission.

High Consideration	HIGH CONSIDERATION AND LOW STRUCTURE	HIGH STRUCTURE AND HIGH CONSIDERATION
	LOW STRUCTURE AND LOW CONSIDERATION	HIGH STRUCTURE AND LOW CONSIDERATION
Low Consideration		
	Low Initiating Structure	High Initiating Structure

Figure 4. Combinations of leadership factors. Adapted from "What is Organizational Development?" by D. Richards 2012. Copyright 2012 by ODPortal.com. Adapted with permission.

In the late 1950s, Cartwright and Zander (1968) began their research through the University of Michigan focusing on group workers:

Dorwin Cartwright and Alvin Zander studied the objectives of groups, finding that group objectives fall into one of two categories. The first objective was the achievement of the group's goals. This aligns with the task orientation. The second objective was the maintenance or strengthening of the group. This aligns with the human or worker orientation seen in past studies. (Richards, 2012, p. 1)

As these studies were closely interpreted, it appeared the final result was that effective leaders fall into two groups, autocratic and democratic. Then, from such conclusions, more details surfaced in developing style approach leadership. Basically, a production oriented leader was labeled as an authoritarian type leader; as one who uses their authority and makes the decisions that lead to goals being accomplished. If employees are able to participate in the decisions making, then the leader is labeled democratic (Cartwright & Zander, 1968).

Renis Likert (1967) expanded on the studies and researched what differentiated effective leaders from ineffective leaders. According to Likert, "Supervisors with the best records of performance focus their primary attention on the human aspects of their subordinates' problems and on endeavoring to build effective work groups with high performance goals" (p. 7). Likert's research found that the most effective leaders were employee centered versus job centered. In 1967, Likert developed a graph to help determine the recipe for effective leaders. The most effective leaders were found to be ones who have trust, goals based on participation and improvements, and friendly interaction with employees.

	Trust	Motivation	Interaction
System	no trust	fear, threats, and punishment	little interaction, always distrust
System	master/servant	rewards and punishment	little interaction, always caution
System	substantial but incomplete trust	rewards, punishment, some involvement	moderate interaction, some trust
System	complete trust	goals based on participation and improvements	extensive interaction. Friendly, high trust.

Figure 5. The table of organizational and performance characteristics of different management systems. Adapted from *The Human Organization: Its Management and Value* (p. 86), by R. Likert, 1967, New York, NY: McGraw-Hill. Copyright 1967 by McGraw-Hill. Adapted with permission.

Blake and Mouton (as cited in Blake, 1964) developed their studies of leadership behavior by creating the famous Managerial Grid (see Figure 6), which identifies two functions: the task function or concern for production and the relationship function or concern for people. The grid depicts five leadership styles:

- Impoverished Managers measure low concern for production and people
- 1.9 Country Club Managers measure high concern for people and low concern for production
- 9.1 Task Managers measure high concern for production and low concern for people
- 5.5 Middle of the Road Managers measure medium concern for production and medium concern for people

- 9.9 Team Managers measure high concern for production and high concern for people

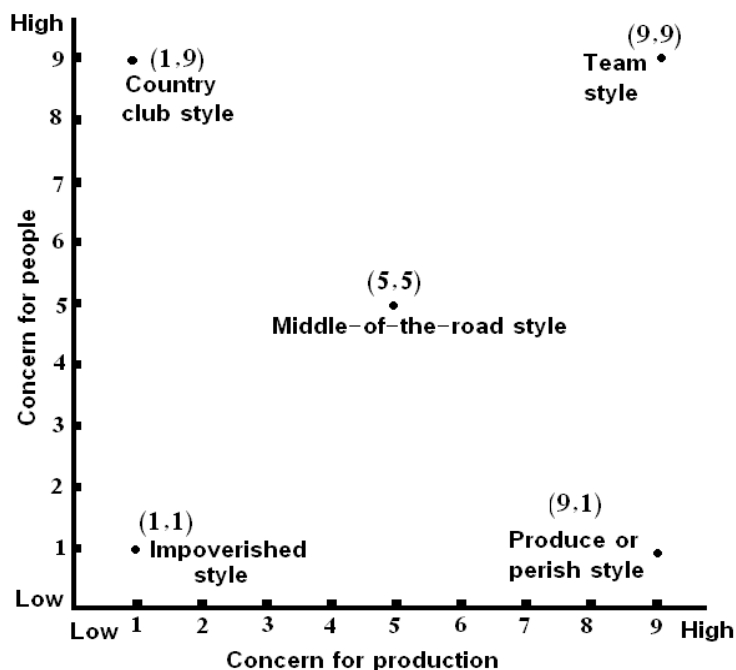


Figure 6. The managerial grid. Reprinted from *The Managerial Grid* (p. 18), by R. Blake, 1964, Houston, TX: Gulf Publishing. Copyright 1964 by Gulf Publishing. Reprinted with permission.

The strengths of style approach leadership are that the research is more specific to behaviors than simply characteristics; the studies conducted are highly credible, the identification between task and people bring a strong balance to the essence of leading, and the concept is easily understood for application and improvement of leaders who can identify their own behaviors from the research.

The criticisms of this leadership theory are that the research does not depict the overall performance of the leaders in relation to behaviors and morale, job satisfaction and productivity, universal behaviors are not easily identifiable, and lastly the high-high

style of leadership is not always a consistent measure of effective leadership because situations vary for all leaders.

The style approach of leadership helps leaders recognize their behavior, and is not to be used as a tool for telling leaders how to behave. The balance of task and people is a valuable instrument for leaders as they combine working conditions with human relationships to accomplish goals.

Situational Leadership Theory

Situational leadership is one of the most widely recognized approaches and is commonly used by organizations in developing leaders. “Situational leadership is a popular and widely used model that emphasizes using more than one leadership style, particularly in developing subordinates in the military” (Yeakey, 2002, p. 82). The situational theory of leadership was developed by Hersey and Blanchard (1996) and has been refined as time has gone on.

The approach of the situational model is that the leader must vary or adapt their leadership style based on the needs of the situation. As stated by Grover and Walker (2003), to be effective, a leader must use a style or set of behaviors that fits the unique demands of the situation. The approach relies on directive and supportive behaviors based on the current need. The leader must assess the competence of the employees and determine if a directing, coaching, supporting or delegating style is required to complete the task at hand. There are times when the leader must shift approaches mid-stream to accomplish the work product. Yeakey (2002) states, “To develop subordinates to become effective leaders and operate as cohesive teams, leaders must be adaptable in their own

leadership styles to move toward participative leadership” (p. 81). As the employees skills evolve, the leader should shift the style to accommodate the group.

The directing style has a high directive and a low supportive behavior. This is when the leader communicates the required outcome and carefully manages the employees. Avery and Ryan (2002) believe a manager is advised to be more directive and less supportive with a new task to a new employee.

The coaching style has a high directive and a high supportive behavior. In this case, the leader works with the employees as a mentor, directing the activity and supporting the employees along the way. Hersey and Blanchard (1996) confirm that coaching is essential for moving an employee through the dissatisfaction stage when the group needs direction, support, encouragement, and listening to. In the end the leader will decide the best course of action for the desired outcome.

Next is the supporting style, which is high supportive and low directive. The leader takes on more of a facilitator approach and allows the employees to use their skills to produce the goal. The leader is there to resolve any difficult situations or be used as a reference when employees are posed with complex decisions. Leaders in this style are generally engaging in detailed dialog and recognizing employees for excellent work product. In recognition and situational leadership II, Blanchard (1997) states that a manager of an employee in this stage of development needs to provide clear, specific positive recognition to the employee for the achievement of the desired performance.

Finally, the delegating style is a low supportive and a low directive behavior. The leader takes a hands-off approach in this style. The role of the leader is more of inspiring or motivating the employees to accomplish the goals. There is little task oriented or

intervention by the leader. Grover and Walker (2003) state, “By delegating, the leader provides the follower full autonomy to do the assigned work with the leader only monitoring work outcomes” (p. 14). The leader allows the employees to take responsibility for the final product.

One strength of situational theory is a well-documented process. This is not a new theory and it has been practiced by many large organizations over many years. Therefore, it has evolved into a positive instrument that has proven a certain amount of success over time. The situational leadership model has arguably one of the most utilized leadership tools and theories in the business industry today (Bass, 1990).

The situational theory is a very easy approach to understand for leaders. As stated by Northouse (2007), a strength of situational leadership is its practicality. Implementation of the approach may pose a greater challenge, however, the concept of the style is clear to future leaders.

Another positive aspect of the situational model is that it allows for the leader to determine the employees’ competence and implement the approach best suited for that scenario, while providing the flexibility to modify the approach. According to Yeakey (2002), “Change may occur in the maturity level of the follower, new technology may be introduced in the organization, or a structural change may occur requiring the leader to move backward on the curve to provide the appropriate level of support and direction” (p. 77). Each employee is unique and the situational model allows for the leader to consider the impact to each individual and to adapt when necessary.

One of the models drawbacks is that it is not precise in the concept. This means that employees are complex and not all employees can be bucketed in these four

categories. There is some ambiguity in determining the level of employee competence for the sake of the models consistency. Not all employees experience the wave of highly committed, then change to little commitment and then back to a highly committed status. According to Avery and Ryan (2002), the situational leadership model is puzzling because it combines high and low directive and supportive behaviors with high and low competence and commitment in the developmental levels. Another basic assumption is that the leader is an experienced and mature individual and that the employees are inexperienced and immature individuals. This is a narrow point of view and lends itself to questioning the accuracy of the model.

Finally, there is a question to the large group setting versus the small group setting. The model would take the same approach to the group development as it would to the individual development, when there are certainly different aspects and dynamics to the two scenarios. As cited by Blanchard and Hersey (1996), the Parisi-Carew argued that if groups go through these stages, why would the development process for individuals be different?

A comprehensive knowledge of how groups develop along with the intricacies of group dynamics will help in deciding the readiness level of the group at a particular time (Grube, Phipps, & Grube, 2002). Figure 7 presents the Situational Leadership II Model by Blanchard (1997).

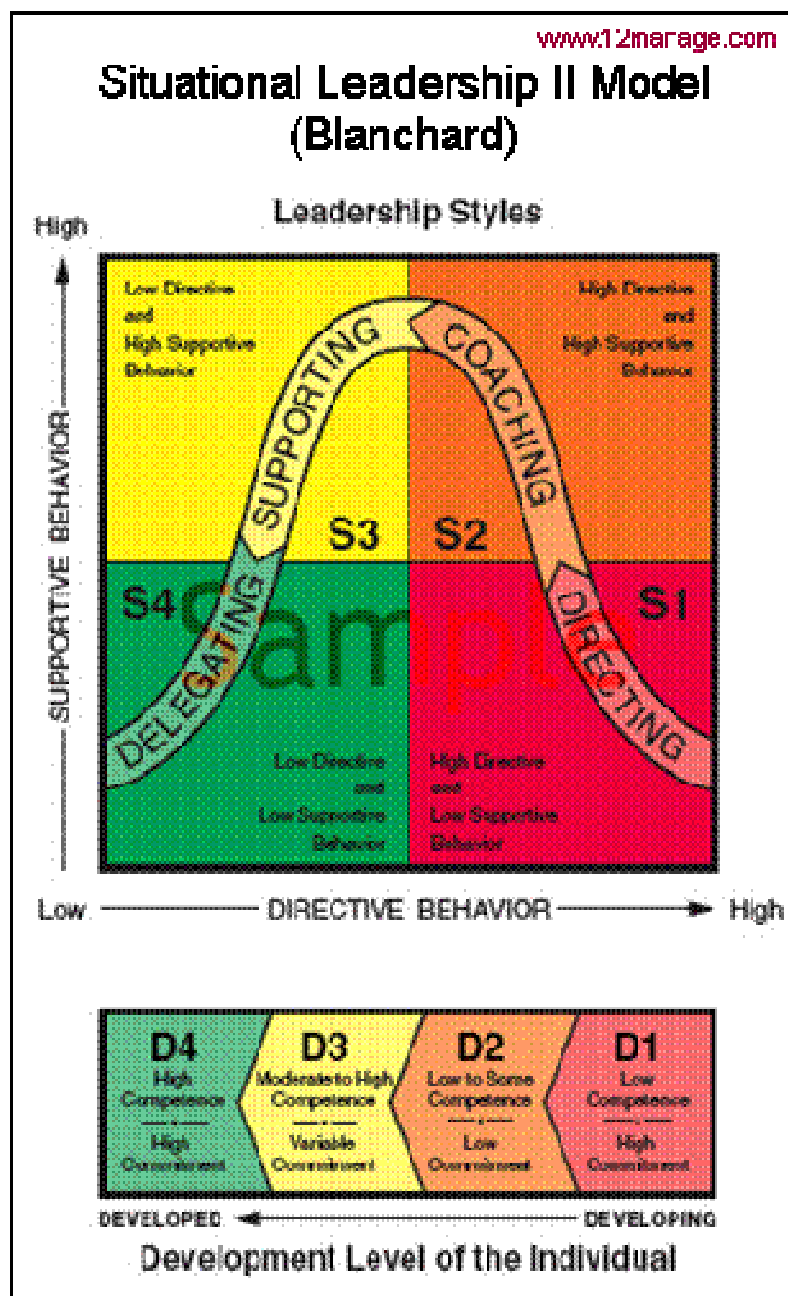


Figure 7. Situational Leadership II Model. Reprinted from "Recognition and Situational Leadership II," by K. Blanchard, 1997, *Emergency Librarian*, 24, p. 38. Copyright 1997 by Emergency Librarian. Reprinted with permission.

Contingency Leadership Theory

The contingency theory takes a different approach than the situational theory in that the leader is matched to the position versus the leader adapting to the situation. In the contingency approach, if a leader has a particular style that is considered preferable by the organization, then that leader is the correct fit for the position. “A firm’s strategy and structure must fit each other if performance is to be enhanced” (Meznar & Johnson, 2005, p. 121).

In describing the styles under the contingency theory, they are task motivated and relationship motivated. There is a measure for the leader’s style in this model, which is described by the Least Preferred Coworker (LPC) scale. The leader is matched to the proper style based on their score on the LPC scale. High scores are relationship motivated leaders and low scores are task motivated leaders. According to Northouse (2007), by measuring a leader’s LPC score and the variables, it can be predicted if a leader is going to be effective in a particular situation.

There are three variables in the contingency model which are important to determine what situation a leader will be successful in. These variables are Leader-Member Relations, Task Structure and Position of Power (see Figure 8).

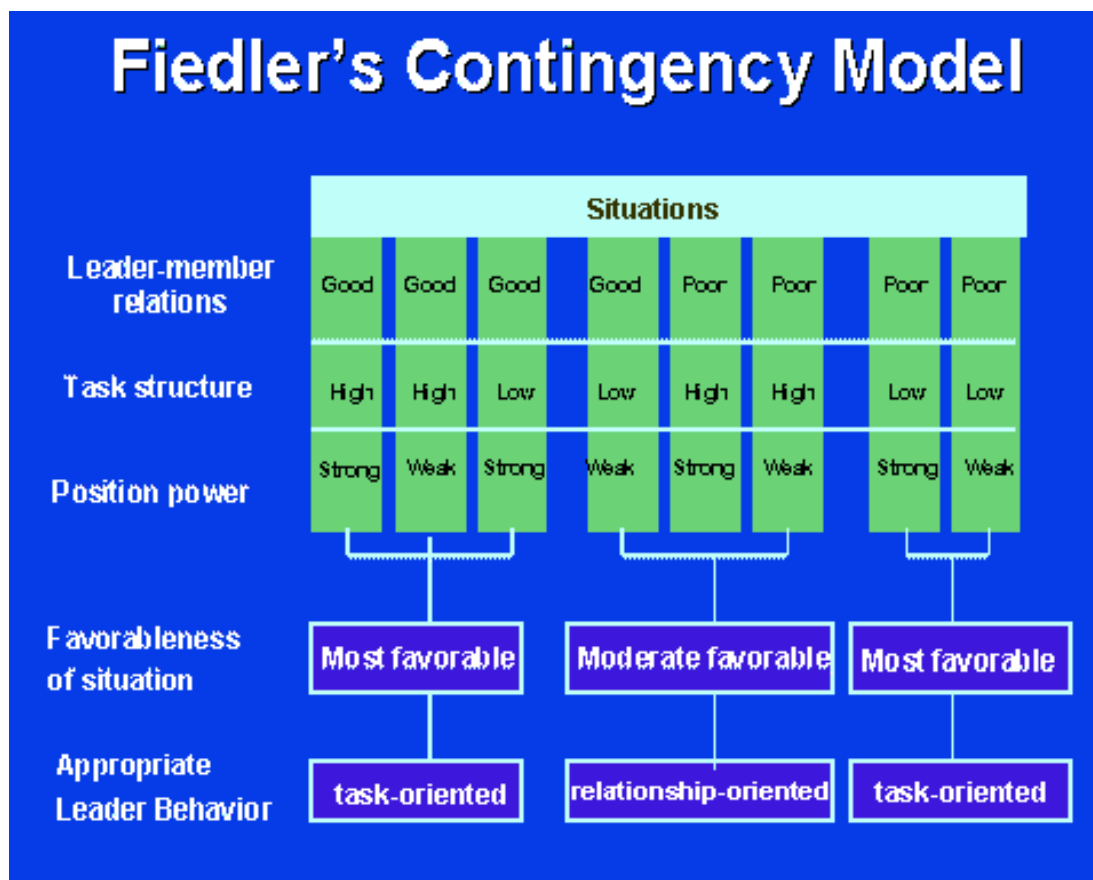


Figure 8. Leader-member relations, task structure and position of power. Reprinted from *Leadership: Theory and practice* (p. 71), by P. G. Northouse, 2007, Thousand Oaks, CA: Sage Publications. Copyright 2007 by Sage Publications. Reprinted with permission.

Leader-Member Relations summarizes the relationship between the employees and the leader. In short, are there strong positive characteristics versus negative characteristics thought of the leader overall by the employees.

The task structure variable is the clarity of the overall task described. Highly structured tasks create a more organized situation for the leader, while unstructured tasks leave goals to be achieved in doubt for employees and lesson the influence that a leader has over the situation.

The third and final variable is position power. This is actual power by title or position a leader has to determine the employee's future. Strong power is the promotion

or firing of an employee, as opposed to weak power leaders that don't have the authority to decide the employee's future.

A strength of the contingency model is that the contingency theory has been around for a while and has been the focus of many research projects which confirm that it is a solid theory. According to Goodson, McGee and Cashman (1989), "The proliferation of contingency theories of leadership in the organizational literature has resulted in considerable empirical testing" (p. 446).

By way of the contingency theory, the focus of a leader being matched with a style had never been considered before. This opened the door for a new way of considering the approach of leading a specific task. The theory allows for leaders to be effective in a particular given situation. The theory allows organizations to place leaders into a win-win situation based on the style they possess and desired outcome needed to be achieved.

A criticism for the contingency theory is that it is a narrow way of thinking and doesn't explain the rationale for particular leadership approaches are successful in certain situations versus why there are unsuccessful in other situations. Spinelli (2006) states that the contingent reward process produces only anticipated levels of effort and standard performance. The LPC scale has been called into question for its accuracy, current applicability and its bias on determining another leader's behavior.

A major criticism is the dilemma of no leaders within the organization meeting the criteria determined by the contingency model. Would this change the decision by management to use the situational theory of leadership rather than the contingency theory of leadership? Spinelli (2006) states, "An integral part of a strategy to improve an

organization's leadership process is the identification of individuals who have the capability to be effective leaders at all levels of an organization" (p. 18).

Transactional Leadership Theory

Transactional leadership is as it sounds, leadership based on individual exchanges or interaction which lead to the growth of both the leader and the followers. As stated by Kest (2006), subordinates will respond to the leader based upon rewards and punishments with a clear chain of command. Motivation is a key factor to a transactional leader due to fact that both the leader and the follower have similar interests at hand. According to Aarons (2006), "An effective transactional leader is able to recognize and reward followers' accomplishments in a timely way. However, subordinates of transactional leaders are not necessarily expected to think innovatively and may be monitored on the basis of predetermined criteria" (p. 1,163).

The transactional model by Bass and Avolio (as cited in Bass, 1990) describes a contingent reward and management by exception creates expected outcomes. What this means is that there is a common goal by both the leader and the followers or a contingent reward. The leader and the follower combine energy to acquire that common goal. Leaders use a management by exception process, which means, criticizing or providing feedback in a negative form to the follower to achieve the goal. Hood (2003) states that transactional leadership is based on legitimate power or authority within the organization. The expected outcome will be the result of combining the contingent reward with the management by exception processes.

Leader-Member Exchange Theory of Leadership

The leader-member exchange (LMX) theory is a dynamic concept of leadership that emphasizes the relationship between a leader and follower, which in turn delivers positive results in the areas of task performance and job enrichment. The LMX model has evolved over nearly 40 years and incorporates both a transactional and transformational style of leadership (Graen & Uhl-Bien, 1995). The depth of research surrounding this theory is directed at the reciprocal exchanges between the leader and follower. According to Wang, Law, Hackett, Wang, and Chen (2005), “There is a reciprocal process in the dyadic exchanges between leader and follower, wherein each party brings to the relationship different kinds of resources for exchange” (p. 421).

In particular, leaders often have a special relationship with an inner circle of trusted lieutenants, assistants and advisors, to whom they give high levels of responsibility, decision influence, and access to resources. This in-group pays for their position. They work harder, are more committed to task objectives, and share more administrative duties. They are also expected to be fully committed and loyal to their leader. The out-group, on the other hand, is given low levels of choice or influence (Syque Consultants, 2012).

Therefore, a high-quality LMX relationship exists between a leader and follower who is part of the *in-group*, whereas low-quality LMX relationships involve followers who are part of the *out-group*. Furthermore, high levels of information exchange, mutual support, informal influence, trust, and greater negotiating latitude and input in decision influence represent a high-quality LMX relationship (Somech & Wenderow, 2006).

While there are no set criteria for initiating an LMX relationship, because it is reciprocal, most research suggests that both leader and follower commence the design among each other. Followers with strong personal identification with their leaders enhance their sense of self-worth by internalizing their leaders' values and beliefs and by behaving in accordance with them. In so doing, followers garner praise, recognition, and enriched role responsibilities, and these results in a higher quality of social exchange with their leaders (Wang et al., 2005).

Syque Consultants (2012) propose three steps to developing LMX which involve the following: role taking- a member joins the team and the leader assesses his/her abilities in order to offer opportunities for the member to demonstrate his/her skills; role making- a second phase in which the leader and the member exchange informal negotiations that promote benefits in return for loyalty; and routinization- the cycle begins again, and continues in the relationship.

LMX develops through three sequential stages: stranger, acquaintance, and partner which all rely on transformational type social exchanges (Graen & Uhl-Bien, 1995). At the stranger stage, leaders will assess followers' ability to fulfill responsibilities by modestly expanding their roles. "Greater responsibilities, discretion, and benefits are given as the follower meets these successively expanded role responsibilities" (Wang et al., 2005, p. 423). In the acquaintance stage, there are increased social exchanges among members and they begin to share greater information and resources on both a personal and work related level (Graen & Uhl-Bien, 1995).

A mature partnership in the LMX relationship transforms when there is a shift in the followers' motivation from a desire to satisfy the immediate self interest via quid-pro-

quo exchanges to a desire to satisfy longer term and broader collective interests of the work unit (Wang et al., 2005). LMX is a maturing process that develops and deepens in quality over time.

The influence of LMX in organizations delivers evident results in task performance and job enrichment. According to Lapierre, Hackett, and Taggar (2006), “In low-quality LMX relationships, the exchange between parties is mostly of an instrumental, quid-pro-quo nature, wherein followers receive standard benefits (e.g. pay, benefits, safety) in exchange for complying with formal job requirements (duties, rules, standard procedures)” (p. 492). In high-quality LMX relationships, loyalty and contributions from followers in work-related forms, such as working longer hours to meet project deadlines, promote great task performance. This performance, in turn, rewards workers with special privileges that lead to career-enhancing opportunities. “Accordingly, task performance is a form of currency in the social exchange between leader and follower, and a means of fulfilling obligations for reciprocity” (Wang et al., 2005, p. 422).

The LMX model that reflects greater follower job performance is characterized by high levels of information exchange, mutual support, informal influence, trust and greater negotiating latitude and input in decision making (Somech & Wenderow, 2006), thus creating an environment where this theory can work in a positive cyclic manner. The idea of greater job performance from employees is a motivational factor in organizational leadership.

The job enrichment that is experienced when high-quality LMX exists in the work atmosphere also helps to motivate followers. When workers experience a social

exchange that makes them feel valued, it promotes a healthy desire to work toward higher levels of achievement, both for the worker and the company. A certain level of job satisfaction allows workers to accomplish this, but when high-quality LMX is factored into the equation, the job enrichment becomes fuel for social exchange between followers and leaders. According to Graen (2003) followers' job enrichment has been recognized among LMX scholars as an important component of the LMX leadership model, whereby followers engaged in higher-quality LMX relationships are likely to have been given more enriched work opportunities compared to followers in lower-quality LMX relationships (Lapierre et al., 2006).

As job enrichment increases, leaders recognize the effectiveness of LMX and are further inclined to deepen the quality of their role in the social exchanges that strengthen the reciprocal cycle. Enriched work opportunities allow followers to provide leaders with more valuable work contributions, which are necessary to cultivate a high-quality work relationship (Graen, 2003).

While the many characteristics of LMX appear to deliver positive results among leader-member relationships, task performance, and job enrichment, there are some limiting factors that create stressful LMX circumstances. Graen (2003) cautiously suggests that because of the demonstration of high-quality exchanges among leaders and followers, leaders have a fundamental expectation for exemplary job performance. In the event that LMX is affected by poor social exchange, the job performance will likely be affected as well.

There are also stress factors that weave into LMX due to the increased requirements that followers face in high-quality LMX arenas. Ideally, low-quality LMX

exchanges result in higher stress levels because subordinates do not receive adequate information to ease their feelings of uncertainty (Harris & Kacmar, 2006). In some instances, high-quality LMX suffers from high stress on behalf of the member. Subordinates who continue to receive benefits from high-quality LMX may soon feel obligated to meeting every request from their supervisor. According to Harris and Kacmar (2006), “However, if at some point the requests of their supervisors overwhelm the subordinates, the requests may lead to increased levels of stress as subordinates move from positive outcomes of LMX to potentially negative ones” (p. 69). Decreased feelings of stress are plausible when leaders offer employees ways to increase certainty and limit perceived threats in the place of work. This in turn requires greater efforts from the leader which in some instances may contribute to leader stress in LMX.

While high-quality LMX receives acclaim for its evident success in task performance and job enrichment, it does not go without some form of criticism. The LMX relationship can appear to be discriminating against workers who do not fall within the *in-group* category. Therefore, *out-group* members are treated more formally and have less opportunity to attain the same level of job satisfaction that *in-group* members receive from their social exchanges with leaders. It is also argued that LMX is a game of favorites. Leaders and followers form a special bond that creates an uncomfortable environment at work for workers who are not included in the circle, and rather than associating the bond with skills and abilities, it is looked upon as a lowly sense of unjust leadership. According to Hollander (as cited in Scandura, 1999), “It is perhaps necessary to rethink the LMX concept, considering what constitutes ‘fair exchange in leadership’” (p. 25).

Finally, there are no valid ideas or theories that fully support the development of a high-quality LMX relationship (Yukl, 1994). Early research only indicates that LMX was developed because leaders found compatibility among subordinates' competencies, yet the studies never explained the relative importance of such competencies, or how the process of LMX worked.

As LMX continues to evolve, the ideal structure would be that the reciprocal exchanges among leader and follower would continue to promote healthy working circumstances that include task performance, job enrichment, and leader-worker equality.

Proficient Leadership Model

Another method of viewing leadership is by the Proficient Leadership Model by Caporicci and Romejko (unpublished). The rationale for choosing this model was based on the right fit with the goal of the project. According to Northouse (2007), transformational leadership has been broken down into four factors, charisma, inspirational motivation, intellectual stimulation and individualized consideration. The Proficient Leadership Model captures transformational leadership traits as well as develops leaders to achieve their maximum potential. As stated by Yeakey (2002), "Situational leadership is a popular and widely used model that emphasizes using more than one leadership style, particularly in developing subordinates in the military" (p. 74). The Proficient Leadership Model (see Figure 9) allows enough flexibility and incorporates elements from several other models which clearly assisted in leading the team while keeping the focus of the desired outcomes of the project.

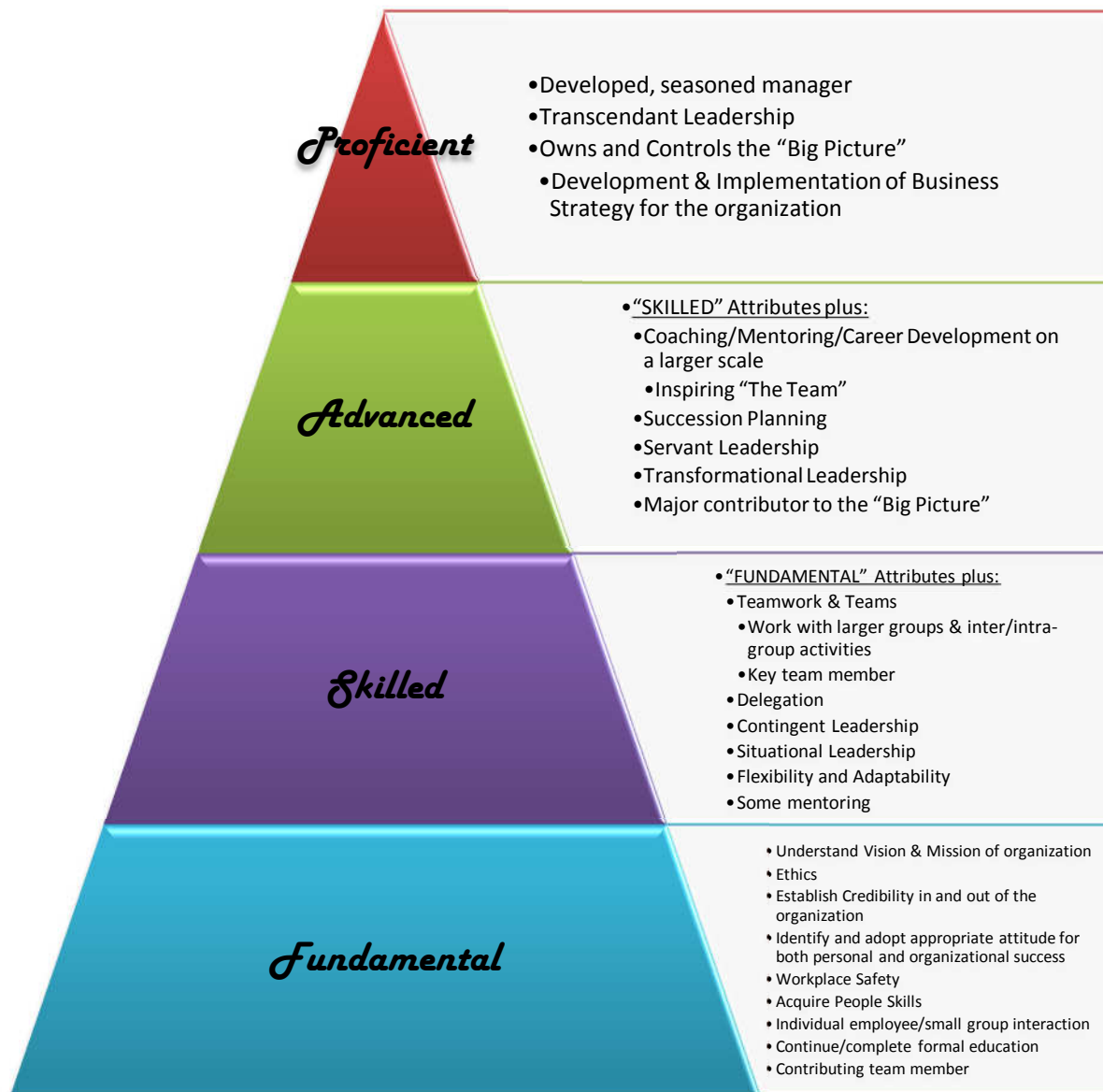


Figure 9. The Proficient Leadership Model, by K. M. Caporicci and M. Romejko, unpublished.

By design, the Leadership Hierarchy is in a pyramidal shape. The significance of the pyramid is to inform the reader that there are steps of knowledge in order to arrive to the leadership pinnacle. Each characteristic level builds upon the next. By clearly understanding each prior level, the reader will understand that Proficient Leadership takes into account all of the characteristics of each of the prior characteristics. The Leadership

Hierarchy is a comprehensive culmination of leadership principles that are distinct in nature. There are four levels that begin with Fundamental Leadership, Skilled Leadership, Advanced Leadership and ultimately Proficient Leadership. Each of these individual levels has specific characteristics associated with them, while Proficient Leadership being the culmination of all the characteristics in the hierarchy. Each of the characteristics is deemed to be essential in arriving to Proficient Leadership.

Beginning at the base of the hierarchy with Fundamental characteristics, the premise is that leadership cannot take place without ethics being the first step of the foundation, having an understanding of the vision and mission, obtaining people skills, etc. The skilled level allows the leader to begin expression of their style in managing the team, learning how to delegate, begin to mentor others, etc. The advanced level allows the leader to harness the direction of the team, while building the organization into a self inspired institution. Some key skills are to develop servant leadership methods, develop transformational abilities, consider succession planning for critical positions, etc. When the leader arrives to the proficient level, an insight to utilizing all elements of the hierarchy is inherent in the leader's behavior and performance. The leader has instilled all of the characteristics in the hierarchy in their management team and even the organization as a whole. The organization is the pinnacle of efficiency even in the leaders' absence.

Each of the levels described within refines the individuals' leadership skills. The premise of the Leadership Hierarchy is to develop quality supervisors, mid-level managers and ultimately provide the skills and ability for individuals to become a highly productive and sustainable top level leader. The curriculum defined within the leadership

hierarchy is a specific list of quality characteristics that are essential for developing high quality leadership skills.

An integral part of the project was the ability to work with other in a team environment. Clearly, the inability to work in teams would be fatal to the success of the project. Decisions were made by the team and not individually. Assuming that two heads (or more) may be better than one and that managers can make better use of their time by delegating various decision-making chores, there is a strong case for turning to groups when making decisions (Kreitner, 2008). There were regular meetings that discussed issues or concerns that arose, as well as, praised individuals for doing great things. Lencioni (2004) states, “If we cannot learn to engage in productive, ideological conflict during meetings, we are through” (p. 10).

The groundwork for the project has been laid by assembling the teams, establishing the cross organizational team, receiving specific direction from the executives, inspiring a shared vision with the PRC team, performing a needs assessment using the S/PELT analysis to determine the cultural impacts to the organization. Now it's time to implement the teams' vision and begin to work toward the project goal.

Developing Candidates for Key Leadership Positions

An important element for maintaining focus and direction of the non-profit agency is identifying appropriate candidates to succeed the current key leadership positions. First, understanding those essential skills necessary is crucial in order to develop those candidates. Second, a curriculum must be developed with the appropriate courses to develop individuals. Third, the candidate's ability must be evaluated including their potential.

The vision of the organization will play a major part in the development of the key leadership attributes for the future. There is a tremendous amount of literature on many aspects of leadership elements and many of those philosophies on what are the key characteristics cross over each other. There are many tools that have been developed which could be utilized in measuring key leadership characteristics. For example, Marcus Buckingham uses a Strengths Finder assessment tool to determine what attributes are strengths for leaders.

There are additional personal self-assessment tools such as the Myers Briggs Type Indicator (MBTI) that identifies individual personality types. There is also the DISC personality test which measures the Dominance, Influence, Steadiness and Contentiousness of an individual.

Utilizing these tests to gather information would seem like a great way to determine that the right sets of characteristics are captured on the leadership team. For example, if the executive leadership team is homogeneous in experiences or beliefs, then another perspective is not available decisions are made.

According to Cheese (2003), companies with human performance leaders have a couple of things in common, they have more highly skilled workers, their development organization is providing timely, relevant and cost-effective services for employees and they have experienced greater success with their training initiative geared toward strengthening key workforce skills.

Coaching and Mentoring

Leaders serve as mentors, coaches, role models, and leaders socializing members in the culture out of a personal obligation to help members of the organization assimilate

into the culture (McCann, 2011). Essential in leadership development are coaching and mentoring sessions. Coaching is a one on one event that pits a more experienced individual in a particular area with a less experienced individual looking to learn about a specific subject. Mentoring is generally a one on one event where a more experienced person shares experiences with a less experienced individual. In order for leaders to learn practical knowledge based on others experiences is an invaluable activity. High potential leaders should seek out others that have achieved success in the particular area that the candidate is interested in. All high potential individuals should be paired up with skilled leaders in the organization or outside of the organization that can assist them in their leadership growth. The ultimate goal of coaching and mentoring is to give the high potential individual a perspective on an experienced individuals point of view to give them that experience in order to make wise decisions or not to make the same error when posed with the scenario.

Reinvigorating the FFRDCs

Fundamentally non-profit organizations have different goals than corporate goals. A leader in a for-profit organization might reward employees based on profit-related targets (e.g., sales), while a leader in a non-profit organization is more likely to reward employees based on the extent to which the social mission is achieved (McMurray, Pirola-Merlo, Sarros, & Islam, 2010). With that said, there are also different leadership goals by non-profit executives. This is more than just a cultural difference between the organizations, it's the goals set forth by the entities mission (Cheese, 2003).

In our daily lives, we hear the terms bureaucratic and inefficient used to describe the federal government. Less than flattering terms used for one of the most powerful

organizations on the planet. Change is happening around us constantly, and if the FFRDCs doesn't adapt to these changes, then more bureaucracy and inefficiency will follow. These changes won't be easy to implement. It will take strong leadership to identify the correct course to follow and gain traction in guiding the organization down that path.

Senior Executive Service (SES)

The SES is the executive leadership program of the U.S. Government that was developed to create excellence, consistency and expertise in government leadership. The SES program came about in 1978 through the Civil Service Reform Act.

The SES has five core qualifications associated with leadership competence, they are:

1. **Leading Change:** This core qualification involves the ability to bring about strategic change, both within and outside the organization, to meet organizational goals. Inherent to this ECQ is the ability to establish an organizational vision and to implement it in a continuously changing environment.
 - *Creativity and Innovation:* Develops new insights into situations; questions conventional approaches; encourages new ideas and innovations; designs and implements new or cutting edge programs/processes.
 - *External Awareness:* Understands and keeps up-to-date on local, national, and international policies and trends that affect the organization and shape stakeholders' views; is aware of the organization's impact on the external environment.

- *Flexibility*: Is open to change and new information; rapidly adapts to new information, changing conditions, or unexpected obstacles.
 - *Resilience*: Deals effectively with pressure; remains optimistic and persistent, even under adversity. Recovers quickly from setbacks.
 - *Strategic Thinking*: Formulates objectives and priorities, and implements plans consistent with the long-term interests of the organization in a global environment. Capitalizes on opportunities and manages risks.
 - *Vision*: Takes a long-term view and builds a shared vision with others; acts as a catalyst for organizational change. Influences others to translate vision into action (U.S. Office of Personnel Management, 2012).
2. **Leading People**: This core qualification involves the ability to lead people toward meeting the organization's vision, mission, and goals. Inherent to this ECQ is the ability to provide an inclusive workplace that fosters the development of others, facilitates cooperation and teamwork, and supports constructive resolution of conflicts.
- *Conflict Management*: Encourages creative tension and differences of opinions. Anticipates and takes steps to prevent counter-productive confrontations. Manages and resolves conflicts and disagreements in a constructive manner.
 - *Leveraging Diversity*: Fosters an inclusive workplace where diversity and individual differences are valued and leveraged to achieve the vision and mission of the organization.

- *Developing Others:* Develops the ability of others to perform and contribute to the organization by providing ongoing feedback and by providing opportunities to learn through formal and informal methods.
 - *Team Building:* Inspires and fosters team commitment, spirit, pride, and trust. Facilitates cooperation and motivates team members to accomplish group goals (U.S. Office of Personnel Management, 2012).
3. **Results Driven:** This core qualification involves the ability to meet organizational goals and customer expectations. Inherent to this ECQ is the ability to make decisions that produce high-quality results by applying technical knowledge, analyzing problems, and calculating risks.
- *Accountability:* Holds self and others accountable for measurable high-quality, timely, and cost-effective results. Determines objectives, sets priorities, and delegates work. Accepts responsibility for mistakes. Complies with established control systems and rules.
 - *Customer Service:* Anticipates and meets the needs of both internal and external customers. Delivers high-quality products and services; is committed to continuous improvement.
 - *Decisiveness:* Makes well-informed, effective, and timely decisions, even when data are limited or solutions produce unpleasant consequences; perceives the impact and implications of decisions.
 - *Entrepreneurship:* Positions the organization for future success by identifying new opportunities; builds the organization by developing or improving products or services. Takes calculated risks to accomplish organizational objectives.

- *Problem Solving*: Identifies and analyzes problems; weighs relevance and accuracy of information; generates and evaluates alternative solutions; makes recommendations.
 - *Technical Credibility*: Understands and appropriately applies principles, procedures, requirements, regulations, and policies related to specialized expertise (U.S. Office of Personnel Management, 2012).
4. **Business Acumen**: This core qualification involves the ability to manage human, financial, and information resources strategically.
- *Financial Management*: Understands the organization's financial processes. Prepares, justifies, and administers the program budget. Oversees procurement and contracting to achieve desired results. Monitors expenditures and uses cost-benefit thinking to set priorities.
 - *Human Capital Management*: Builds and manages workforce based on organizational goals, budget considerations, and staffing needs. Ensures that employees are appropriately recruited, selected, appraised, and rewarded; takes action to address performance problems. Manages a multi-sector workforce and a variety of work situations.
 - *Technology Management*: Keeps up-to-date on technological developments. Makes effective use of technology to achieve results. Ensures access to and security of technology systems (U.S. Office of Personnel Management, 2012).
5. **Building Coalitions**: This core qualification involves the ability to build coalitions internally and with other Federal agencies, State and local governments, nonprofit

and private sector organizations, foreign governments, or international organizations to achieve common goals.

- *Partnering*: Develops networks and builds alliances; collaborates across boundaries to build strategic relationships and achieve common goals.
- *Political Savvy*: Identifies the internal and external politics that impact the work of the organization. Perceives organizational and political reality and acts accordingly.
- *Influencing/Negotiating*: Persuades others; builds consensus through give and take; gains cooperation from others to obtain information and accomplish goals (U.S. Office of Personnel Management, 2012).

Chapter Summary

It is clear that leadership is a key component in the success or failure of any organization, however, there are a multitude of models that may be used during any given set of circumstances. A comprehensive understanding of the models will lay the foundation for the following chapters. Many of the models covered in this chapter are time tested proven models. There are nuances or variances that address different attributes in the models. After careful consideration, the Situational Leadership model was chosen for this descriptive study. It clearly indicated the quadrants that the current leadership characteristics fell into.

Chapter 3. Methodology

Leadership characteristics have been considered, discussed, and debated for centuries. There was very little research available on leadership characteristics associated with FFRDCs. For example, the need for profit driven techniques obviously varies from the FFRDC model given the profit incentive. Since FFRDC motivations are not associated with maximizing shareholder wealth or banking on skyrocketing or plunging stock prices, the leadership focus varies as well. This chapter identified the methodology of defining the leadership characteristics within the business organizations of an FFRDC. The completion of this research has expanded the knowledge of the key leadership characteristics of mid-level managers in a FFRDC for future studies.

Chapter Structure

This chapter summarizes the foundation of the methodology used in completing research on this topic. Details on the nature and design of the study are included in this chapter. Additionally, the importance or purpose of the study is described within. The research question had been built upon from chapter one and further described in this chapter. The data sources of participants in this study are detailed including rationale behind the protection of subjects involved. When involving individuals, there was protection for ethical considerations, respectfulness for others, beneficence, judicial, and institutional matters considered. Data collection methods, including verifiability and reliability along with the analytical techniques used to analyze the data are also described.

Nature and Design of the Study

The study was a combination of qualitative and quantitative data collected through interviews and a survey with mid-level managers in the business organizations at

an FFRDC. The design of the study was conducting surveys using the Hersey and Blanchard LEAD Self-assessment and a series of semi-structured follow-up interviews to gather data. The survey was a commercially available tool that asks a series of questions and has an associated scoring system based on the responses. The LEAD Self tool was a very inclusive instrument that covers multiple leadership styles. A copy of the LEAD Self-assessment can be found in the attached Appendix F. The interview questions were a follow-up to the survey if the participant agreed to be interviewed. The intent was to have approximately 10 follow-up interviews. The interview questions are:

1. What do you feel are the top personal characteristics that led to your being promoted to your current position?
2. What leadership styles do you use that have been essential in your position?
3. Do you feel that your leadership characteristics align with the organization's culture?
4. Is there anything else you would like to add?

The detailed questions and interview agenda can be found in Appendix C of this study. The interviews were organized in a semi-structured method in order to allow the interviewee to elaborate on the responses to the questions. The questions were provided to the participants prior to the interviews. The results from both the surveys and interviews provided comprehensive data in determining the key characteristics leaders of mid-level business managers at an FFRDC.

The data was obtained in qualitative characteristics and matched against the situational leadership model. The study utilized qualitative and quantitative research methods and techniques to analyze the data and results. The survey data was gathered by

the researcher and analyzed using the tools provided by the situational leadership model. While it may have been interesting to gather bio-demographic data, such as gender and age group, the gathering of such data might unwittingly identify the organization.

Purpose

The purpose of this study was to determine the key leadership characteristics of mid-level managers within the business organizations at an FFRDC. By identifying and compiling these key characteristics based on actual data, all FFRDCs may be able to develop leadership programs for use within their organizations.

Research Question

The following research question was the focus of this dissertation. The research question was:

1. What are the most prevalent leadership characteristics of mid-level management, within the business divisions, at FFRDCs?

Sources of Data

An initial criterion for determining the participants to be interviewed was that they must manage people at an FFRDC. The second criterion was that the source of data must be a generated list of managers with the title of Supervisor or Section Manager within business directorate at an FFRDC. With that criterion in place, the data sources were developed from one FFRDC located in California based on the researchers' location. The overall number of individuals that met the above criterion was 64 Supervisors and 19 Section Managers. The researcher submitted the survey to all mid-level managers in the business divisions. According to Hitzig (2004), "A nonstatistical sample is selected by the exercise of judgment, and not by chance. Haphazard,

judgmental, and purposive sampling are some of the terms that describe a nonstatistical sample” (p. 31). Therefore a sample was not used. Data gathered from the surveys and interviews, was analyzed and summarized in Chapter 4. The data led to determining the key leadership characteristics by occurrence based on the survey responses and the interviewee’s responses.

Protection of Human Subjects

According to Pepperdine University (2012), “The primary goal of the Graduate and Professional Schools (GPS) Institutional Review Board (IRB) is to protect the rights and welfare of human subjects participating in research activities conducted under the auspices of Pepperdine University” (p. 1). Forms ensuring the protection and wellbeing were submitted for each participant in this study. The IRB process outlined by Pepperdine University’s Graduate School of Education and Psychology were carefully adhered to in order to protect all human subjects involved in the study. Additionally, Pepperdine University also follows the U.S. Code of Federal Regulations, DHHS (CFR), Title 45 Part 46 (45 CFR 46) entitled Protection of Human Subjects.

Ethics is essentially the study of standards for determining what behavior is good and bad or right and wrong (Aronson, 2001). The United States Congress developed and enacted the National Research Act in 1974, which created the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. The goal of the commission was to oversee the use of human experimentation in medical research and determine if subjects were treated appropriately. Additionally, Pepperdine University is guided by the ethical principles identified in the Belmont Report (Pepperdine University, 2012). The Belmont Report is a statement of basic ethical principles and

guidelines that should assist in resolving the ethical problems that surround the conduct of research with human subjects. The expression *basic ethical principles* refers to those general judgments that serve as a basic justification for the many particular ethical prescriptions and evaluations of human actions. Three basic principles, among those generally accepted in our cultural tradition, are particularly relevant to the ethics of research involving human subjects: the principles of respect of persons, beneficence and justice (U.S. Department of Health and Human Services, 2012). Lussier and Achua (2007), state that ethical leadership requires courage, the ability to do the right thing at the risk of rejection and loss.

Respect for persons incorporates at least two ethical convictions: first, that individuals should be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection (U.S. Department of Health and Human Services, 2012). During this study, it was critical that respect for persons in the study was at the forefront of the researcher's decision process. Consent was required by the participants prior to the survey or interview. The researcher clearly explained the purpose of the study along with the confidentiality and protection of the participants' data. The principle of respect for persons thus divides into two separate moral requirements: the requirement to acknowledge autonomy and the requirement to protect those with diminished autonomy.

Persons are treated in an ethical manner not only by respecting their decisions and protecting them from harm, but also by making efforts to secure their well-being (U.S. Department of Health and Human Services, 2012). There are two general rules that have been formulated as complementary expressions of beneficent actions in this sense: (a) do

not harm, and (b) maximize possible benefits and minimize possible harms. The researcher took appropriate steps to ensure that all participants were treated properly.

Consideration to *justice* refers to the fairness in selection of participants that may derive a benefit or a burden by participating in this study. There were no judgments made by ethnic background, age, gender, or religion. The participants selected were listed as mid-level managers in the business divisions of an FFRDC.

Using the Pepperdine University website on IRB, there were countless resources available to ensure that human subjects are protected during various studies. According to the Pepperdine University (2012) website:

The Graduate and Professional Schools Institutional Review Board (GPS IRB) seeks to protect the rights and welfare of human subjects participating in research activities conducted under the auspices of Pepperdine University's graduate schools, which covers faculty members and students from the Graduate School of Education and Psychology, School of Public Policy, Graziadio School of Business and Management, and School of Law. Applications submitted to the GPS IRB generally encompass social, behavioral, and educational research and are usually considered medically non-invasive. (p. 1)

Additionally, “Pepperdine University is a Christian university committed to the highest standards of academic excellence and Christian values, where students are strengthened for lives of purpose, service, and leadership” (Pepperdine University, 2012, p. 1).” Finally, confidentiality was ensured to all candidates who agreed to participate in the study, as well as, the FFRDC where they work.

Data Collection Strategies

The data sources considered were managers with the title of supervisors and section managers within the business organizations at an FFRDC. The interview questions were developed and submitted to the participants in advance, to facilitate a

smoother discussion during the actual interview. Also, the survey was distributed with a two week return date deadline, allowing for detailed consideration by the participants.

Participants

The organization where the employees reside was considered one of the 39 United States Government FFRDC facilities. Employees with the title of Section Manager and Supervisor within the business division of an FFRDC were used to determine the participants involved in the study. The positions directly managed employees. The positions of the individuals in the data sources were openly known, or not discreet. There are a total of 83 individuals that met these criteria and were selected to participate in the study. The survey was submitted to all 83 supervisors and managers with a follow-up interview of those interested. Their participation was voluntary and no replacements were selected if they chose not to participate. Discriminatory factors such as age, gender, ethnic background were considered in the participation selection process. The method of acquiring the data necessary to complete the study was surveys and follow-up interviews with carefully formed questions. Each participant was briefed on the purpose of the study, the interview process, the amount of time to be spent during on the survey and the interview as well as the IRB paperwork. Authorization for the research and interview questions in protecting human subjects was obtained from Pepperdine University prior to involving the participants in the study. See Appendix B for a copy of the Informed Consent Letter.

The follow-up interviews were done based on the participant interest on the survey. There was a question requesting a follow-up interview if the participant was interested. Therefore, the interviews were conducted at the request of the participant.

Prior to any interviews, the researcher advised the potential participants of the purpose of the study and the interview procedure along with the IRB process. The participants were provided a copy of the IRB consent letter (see Appendix B) if they felt inclined to participate, then they signed the form and return it to the researcher. The researcher proceeded with the participants that returned the IRB consent forms. If the participants had questions related to the form they were assisted by the researcher in answering their questions. Those participants that chose not to return the form, were eliminated from consideration. The participants that signed the form and return it to the researcher were provided a copy of the interview questions prior to the interview.

The researcher established a rapport with each participant during the interview. The participant discussed each question as much or as little as they desired. None of the questions caught the participants off guard, given the fact that they received the questions in advance.

Instruments

There are two instruments that were utilized by the researcher to obtain the necessary data to complete this study. The purpose of utilizing these two tools was to obtain data in different formats, a well-designed and proven commercially available survey and an interview with an open dialog. First, the researcher utilized a survey instrument developed by Hersey and Blanchard called LEAD-Self, which was used to evaluate leadership behaviors of participants when attempting to influence the actions and attitudes of others. Second, the researcher developed interview questions designed to elicit dialog with the participants. The interview questions were designed to allow freedom of response while covering a tremendous amount of territory with the

participants. Each of the interview questions allowed the participants to reflect on the key characteristics of leadership that they have utilized in their position.

The LEAD-Self instrument measures three aspects of leadership behavior in terms of the Situational Leadership Model II: (a) leadership style, (b) style range, and (c) style adaptability. The questionnaire provided 12 short situations. Each situation had four alternative responses that correspond to one of four leadership styles: Telling, Selling, Participating, and Delegating. The LEAD questionnaire described 12 brief situations and offered four possible leadership responses, one representing each of the four Situational Leadership styles for each situation. The 12 brief job situations placed the leader in interaction with one or more of his or her subordinates. In each of these situations, there were four possible actions listed that the respondent can take. From this list, the individuals must select only one action that in their own opinion would most closely approximate what their response would be if confronted with such an event in a real situation. For actual examples from the LEAD instrument, see Table 1. As the instructions indicate, one must select the action that they would actually do, not imagine what they might do. Their selection would be representative of their actual leadership behavior. The instructions also stated that no question can be skipped, and if there is no alternative that provides an adequate description of the respondent's behavior, the respondent is asked to select the item that most closely approximates the respondent's action that would be actually taken in the given situation.

Table 1

Two Examples of the LEAD Situational Items

SITUATION	ALTERNATIVE ACTIONS
Your followers are not responsible lately to your friendly conversation and obvious concern for their welfare. Their performance is declining rapidly.	<p><i>You would...</i></p> <p>A. Emphasize the use of uniform procedures and the necessary for task accomplishment.</p> <p>B. Make yourself available for discussion but not push your involvement.</p> <p>C. Talk with followers and then set goals.</p> <p>D. Intentionally not intervene.</p>
The observable performance of your group is increasing. You have been making sure that all members were aware of their responsibilities and expected standards of performance.	<p><i>You would...</i></p> <p>A. Engage in friendly interaction, but continue to make sure that all members are aware of their responsibilities and expected standards of performance.</p> <p>B. Take no definite action.</p> <p>C. Do what you can to make the group feel important and involved.</p> <p>D. Emphasize the importance of deadlines and tasks.</p>

The respondent's selections of the 12 LEAD alternative actions were transferred to the LEAD Leadership Style Selection scoring grid, and were totaled up. The grid was arranged to identify the prominent style or styles that were derived from the 12 LEAD situations. This was the scoring grid that identified whether the respondent were at the S1 (Directing), S2 (Coaching), S3 (Supporting), or S4 (Delegating) level. See Figure 10 for a Leadership Style Selection grid example.

	S1 - Directing				S2 - Coaching				S3 - Supporting				S4 - Delegating			
	1				2				3				4			
1															D1	
2															D2	
3															D3	
4															D4	
5															D1	
6															D2	
7															D3	
8															D4	
9															D1	
10															D2	
11															D3	
12															D4	
Totals																

Figure 10. The LEAD scoring grid for the leadership style selection

Once the Leadership Style Selection scoring grid was completed, the totaled numbers were applied to the Leadership Style Profile (see Figure 11). From this profile a primary and secondary (or *backup*) style was determined. A score of three or more in any quadrant indicates high flexibility, two responses reflect moderate flexibility, and a *one* is not statistically significant, and not predictive of that style (Center for Leadership Studies, 2005).

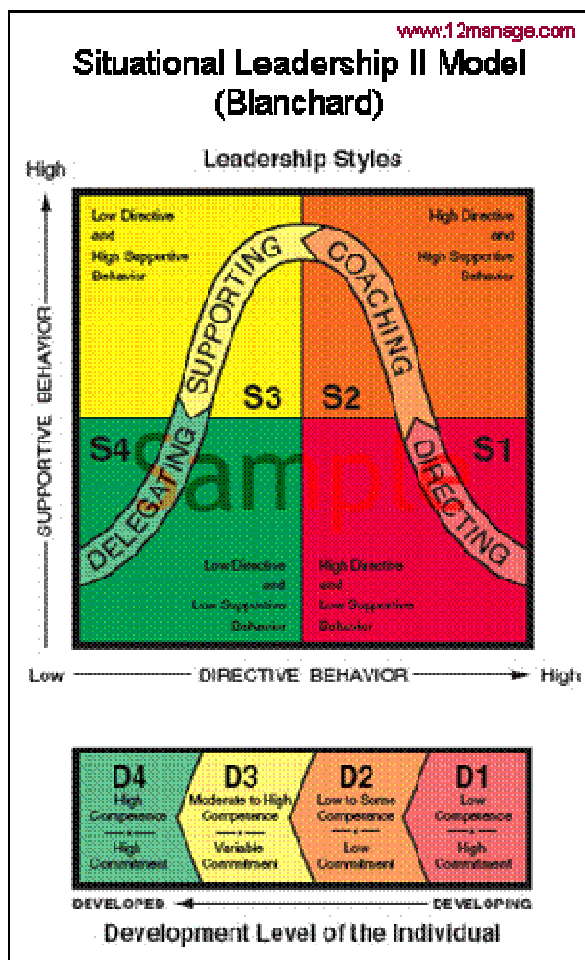


Figure 11. Leadership style profile. Reprinted from “Recognition and Situational Leadership II,” by K. Blanchard, 1997, *Emergency Librarian*, 24, p. 38. Copyright 1997 by Emergency Librarian. Reprinted with permission.

The LEAD-Self instrument also measured the respondent’s leadership adaptability. The LEAD Leadership Style Profile measured the respondents’ leadership tendencies. The LEAD Leadership Style Adaptability examined one’s ability to adapt or vary one’s style in relation to development level of a constituent. The four development levels are D1 (Low Competence and High Commitment), D2 (Low to Some Competence and Low Commitment), D3 (Moderate to High Commitment and Variable Commitment), and D4 (High Competence and High Commitment). Each of the 12 LEAD alternative actions were assigned a score of 0-3, with a 0 representing a very low probability of

success, up to a 3, which demonstrates a *best fit* (Center for Leadership Studies, 2005). When considered collectively, the alternative actions for each of the 12 situations were assigned a point value of 0 to 36. The scores were categorized into three levels of adaptability, low or need for self-development (0-23), moderate (24-29), and high (30-36). The low level score indicated a need for improvement in adaptability of leadership style and effectiveness dimension. The high level score indicated the leader accurately diagnoses the ability and willingness of the follower for the situation and adjusts accordingly. For a sample scoring grid, see the figure below.

	Style Adaptability			
	A	B	C	D
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
		+	+	=
Leadership Style Adaptability Score				

Figure 12. The LEAD leadership style adaptability scoring grid

Interview Process

Interviews were conducted by the researcher and each individual in a one on one format. The questions were previously provided to each interviewee in advance after the IRB documentation is submitted. The researcher followed the IRB format informing the participants of what they could expect during the interview. Specifically, the researcher disclosed the following information:

- Purpose and benefit of the research
- Purpose for and description of their involvement in the study
- Voluntary nature of their participation
- Researchers contact information if questions should arise
- Confidentially of all participants in the study

The format was semi-formal in structure, with the interviewee having the ability to discuss any aspect of the questions posed. Deep thought were be put into the interview questions in order to develop a positive dialog and allow for the interviewee to elaborate on the nature of each question. The interviews were recorded and transcribed with the interviewee's authorization.

Verifiability (Validity)/Reliability

This section elaborates on the concepts of validity and reliability. In addition, the need to instill a rigorous process into the methodology of the study ensures that the results of the study were considered to be both valid and reliable was discussed.

Hersey and Blanchard (1982) report that the stability of the LEAD-Self was moderately strong. In two administrations across a six-week interval, 75% of the

managers maintained their dominant style and 71% maintained their alternate style. The contingency coefficients were both 0.71 and each was significant ($p < 0.01$). The correlation for the adaptability scores was 0.69 ($p < 0.01$). The LEAD-Self scores remained relatively stable across time, and the user may rely upon the results as consistent measure. The logical validity of the scale will be clearly established. Face validity was based upon a review of the items, and the content validity emanated from the procedures employed to create the original set of items.

Several empirical validity studies were conducted on the LEAD instrument. Satisfactory results were reported supporting the four style dimensions of the scale using a modified approach to factor structure. In one study, a significant ($p < 0.01$) correlation of 0.67 was found between the adaptability score of the managers and the independent ratings of their supervisors. The “twelve-item validities for the adaptability ranged from 0.11 to 0.52, and 10 of the 12 coefficients (83%) were 0.25 or higher. Eleven coefficients were significant beyond the 0.01 level and one was significant at the 0.05 level” (Green, 1982, as cited in Hersey & Blanchard, p. 105). Therefore, the validity of the LEAD-Self instrument provides the reliable and consistent results.

Instrument Validity and Panel of Experts

A panel of experts was chosen to review the interview questions used in this study. The proposed panel consists of three experts who were selected based upon background and knowledge of the subject matter contained in the study. The first panel member was a professor at Azusa Pacific University in the Graduate School of Business and Management. She possesses a doctorate in Business Administration. The second panel member was a professor at Pepperdine University and has a doctorate in

Organizational Leadership. The third panel member was the chair of the business school at Westwood College and has completed his doctorate in Organizational Leadership.

Given the background of the expert panel, each of the three members was uniquely qualified to be on the panel as an expert and validate the interview questions used in the study.

Each panel member was sent a copy of the Expert Panel Letter contained in Appendix D, a copy of chapter 1 of the study, for background, and a copy of all interview questions. In addition, the panel members were sent a rubric form (see Appendix E) that was used to assist them in assessing each of the questions. Panel members were asked to rate each question using a scale from 1 to 3. The rankings were described as 1 = Relevant, 2 = Not Relevant, and 3 = Modify as Shown. If the experts ranked the questions a 1 = Relevant, the researcher left it as stated. If the experts ranked the question a 2 = Not Relevant, then the researcher will either eliminate the question or modified it. Experts that ranked a question with a 3, modify as shown, were requested to suggest modifications to the question and were given space on the form to offer suggestions. If there were opposing opinions from the expert panel, then the responses were reviewed and the majority opinion (i.e., two of the three experts) determined whether the question was considered to be relevant as it stood, not relevant to the study, or required modification. Each panel member was given two weeks to provide a response. After two weeks, each panel member provided the researcher with a response through telephone conference or by mail. Beginning with the interview questions, all panel members agreed that the time it took them to complete the survey was reasonable and appropriate. The time to complete the survey should range from 15 minutes to 30 minutes. As for the

LEAD-Self questions, due to the nature of this being a commercially available product, there was no need for the panel to validate the assessment. The LEAD-Self assessment can be found in Appendix F.

Issues Related to the Researcher

By having interview data and survey data, the researcher kept a clear understanding on the correlation between the two sets of data prior to deriving a conclusion. Verifiability and reliability were critical elements. The researcher was a section level manager in the business organization of an FFRDC. The researcher was interested in understanding the key elements of leading large organizations by interviewing and surveying highly experienced individuals.

Role of the Researcher

The key element of the role of the researcher was to accurately gather the data and draw reliable conclusions based on those facts.

Statement of the Researcher Bias

The researcher had an inherent bias with regard to working within an FFRDC business organization. Additionally, some of the interviewee's were coworkers, including those with whom he works together on a regular basis. The mitigation of the researcher's bias was that the surveys were distributed to all mid-level managers and not a sample.

Analytical Technique

The researcher was tasked with designing themes with the data gathered by interviews and surveys. The survey packages, which included the LEAD-Self questions (Appendix F) were emailed all 83 managers at an FFRDC. The survey package included a cover letter, consent form, and the survey instrument. Two weeks was given to

complete and return the questionnaires. To address any concerns of anonymity and to encourage candid responses, a confidentiality statement was included in the package. The cover letter stressed the fact that participants would not be identified since any identifiable information on the company or the participants was not collected. Furthermore, the information collected was not shared with the participants' organization. The researcher was the only person who had access to the data collected.

Of those surveys not returned, a follow-up reminder letter was sent two weeks after the first emailing of the survey package. This reminder was designed to increase the return rate of survey packages. Participation and anonymity were again emphasized on the reminder letter email.

The responses returned by the deadline were collected by the researcher and prepared for the data entry phase of the study. The challenge was the consistent application in order to obtain accurate data.

Data Reduction

Interview data was transcribed and the survey data was entered into a spreadsheet for easy analysis.

Data Display

The researcher used tables and figures throughout this study.

Chapter Summary

The method of data analysis was based on the response to research questions utilizing the interviews and the completed LEAD-Self instrument. The collected data was transcribed, tabulated and prepared for statistical analysis. The returned responses of the LEAD-Self were scored by the researcher according to the guidelines suggested in the

LEAD guidelines provided by the Center for Leadership Studies. The data, once obtained was entered into a database created in Microsoft Excel for Windows. Once the database had been established, descriptive statistics were performed, using frequency distributions and percentages.

The data from the LEAD-Self instrument was scored utilizing the LEAD Directions for Self-Scoring and Analysis. Each LEAD-questionnaire was scored and checked to ensure accuracy. This study utilized descriptive statistical analysis to compare leadership styles, leadership style range, and leadership style adaptability of the respondent groups.

Chapter 4. Results

This chapter summarizes the results of the interviews and the survey data gathered from the Leadership Effectiveness & Adaptability Description Questionnaire (LEAD-Self) survey. Covered in this chapter are the restatement of the purpose of the study, the review of the data collection process, LEAD-Self findings, interview results, summary of the research questions, and the overall chapter summary.

Restatement of the Purpose of the Study

Since there was very little literature that has been published on the key leadership characteristics of business managers within FFRDCs, the researcher would like to expand the knowledge in this area. The purpose of this study was to define the leadership characteristics of mid-level management within the business divisions at an FFRDC. Expanding the knowledge of determining key leadership characteristics at an FFRDC lays the foundation for further research studies at FFRDCs, such as taking a look at executive manager's key characteristics.

Review of Data Collection Process

The organization where the research was performed is considered to be one of the 39 United States Government FFRDC facilities. Employees with the title of Section Manager and Supervisor within the business division of an FFRDC were used to determine the participants in the study. A criterion for selection was that the manager positions must directly manage employees. In this study, the managers were responsible for between 5 and 200 employees each. There were a total of 83 individuals that met the criteria and were selected to participate in the study. The method chosen to acquire the data necessary to complete the study was surveys and follow up interviews with carefully

formed questions. The purpose of utilizing these two tools was to obtain data in different formats, a well-designed, proven and commercially available survey and an interview with an open dialog. First, the researcher utilized a survey instrument developed by Hersey and Blanchard called LEAD-Self (see Appendix F), which was used to evaluate leadership behaviors of participants when attempting to influence the actions and attitudes of others. Second, the researcher developed interview questions designed to elicit dialog with the participants. The interview questions were designed to allow freedom of response while covering a tremendous amount of territory with the participants. Each of the interview questions allowed the participants to reflect on the key characteristics of leadership that they have utilized in their positions as leaders of an organization. The questionnaire provided 12 short situations. Each situation had four alternative responses that correspond to one of four leadership styles: Telling, Selling, Participating, and Delegating. The LEAD questionnaire described 12 brief situations and offers four possible leadership responses, one representing each of the four Situational Leadership styles for each situation. Additionally, the LEAD-Self instrument measured three aspects of leadership behaviors in terms of the Situational Leadership Model: (a) leadership style, (b) style range, and (c) style adaptability. All 83 of the managers were sent electronically the LEAD-Self survey which began on February 12, 2013. Second requests on uncompleted surveys were sent out on February 28, 2013. Thirty-three (33) surveys, or approximately 40% of the surveys were returned by the end date of March 5, 2013. A request for a follow-up interview request was sent to the participants that responded to the questionnaire and five managers agreed to the meeting. All five managers were interviewed with the questions attached in Appendix C. Discriminatory

factors such as age, gender, ethnic background will not be considered in the participation selection process.

LEAD-Self Findings

Data collected from the LEAD-Self instrument revealed the frequency distribution of mid-level managers in their self-reported leadership style, leadership range, and leadership adaptability.

Leadership Style

LEAD-Self instrument categories leadership style into four possible categories: *Telling* (S1), *Selling* (S2), *Participating* (S3), and *Delegating* (S4). The following are the defined states of each of the leadership style categories:

Telling: When follower maturity is low, the model calls for the *telling style* with its emphasis on task directed behaviors. The telling style works best in this situation of low readiness, by giving instructions and bringing structure to a situation where followers lack capability and are unwilling or insecure about their tasks. Leaders define the roles and tasks and closely supervise the followers. Communication is largely one-way in a directive mode (Center for Leadership Studies, 2005).

Selling: The *selling style* is recommended for moderate to high-readiness situations by the follower. Here, followers lack capability but are willing or confident about the task. In this case, the selling style and its emphasis on task guidance are designed to facilitate performance through persuasive explanation. The leader defines the tasks with a collaborative dialog with the follower. The decision-making process remains with the leader, but there is more dialog between the two parties (Center for Leadership Studies, 2005).

Participating: The *participating style* is recommended for low-to-moderate readiness situations by followers. Here, followers are capable but also unwilling or insecure about the tasks. As you might expect, this participation style with its emphasis on relationships is supposed to help followers share ideas and thus draw forth understanding and task confidence. Leaders pass the day-to-day task decisions to the followers. The leader's role is to facilitate and assist in decision-making, but the overall control remains with the follower (Center for Leadership Studies, 2005).

Delegating: When follower maturity is high, the situational leadership model calls for a *delegating style* which might be described as offering minimal leadership intervention. The style is one of turning over decisions to followers who have high task readiness based on abilities, willingness and confidence about task accomplishment. Leaders are involved in the decision-making process and problem-solving, but control for the activity is with the follower. The follower decides when and how to involve the leader (Center for Leadership Studies, 2005). An overall picture of the survey results is presented in Figure 13.

<p style="text-align: center;">Participating 32% High Relationship Low Task</p>	<p style="text-align: center;">Selling 42% High Task High Relationship</p>
<p style="text-align: center;">Delegating 10% Low Relationship Low Task</p>	<p style="text-align: center;">Telling 17% High Task Low Relationship</p>

Figure 13. LEAD Self Survey Summary

The summary of the survey results indicates that the Selling leadership style was the most utilized at 42% of the managers surveyed. This involved a high task focus as well as a high relationship focus. Next was the Participating leadership style at 32% of the managers surveyed. This style utilizes the high relationship and low task focus. The Telling and Delegating styles were next at 17% and 10% responses respectively. These were the least chosen styles by the participants in the survey. This data gives an excellent overall picture of the styles utilized by the FFRDC managers.

There was a *primary style* which is the style that one tends to use most often. There was also a *secondary style*, which is the *backup* style when his or her primary style was not being used. This may include or incorporate more than one style. The primary and secondary leadership styles were determined by the highest and second highest scores, respectively, in the four possible quadrants given the respondents responses to the 12 questions. For example, in the table below, participant A scored 2 for S1 (Telling), 5 for S2 (Selling), 3 for S3 (Participating), and 2 for S4 (Delegating), therefore the individuals primary leadership style was S2 and secondary leadership style was S3. For participant B, they scored 1 for S1 (Telling), 2 for S2 (Selling), 6 for S3 (Participating), and 3 for S4 (Delegating), therefore the individuals primary leadership style was S3 and secondary leadership style was S4.

Table 2

LEAD-Self Scoring Summary Example

Participant	Telling	Selling	Participating	Delegating
A	2	5	3	2
B	1	2	6	3

For those responses with the same scores for either primary or secondary leadership style, separate “Tie” categories were used to indicate a tie in more than one quadrant. The table below represents the frequency of the participant’s primary leadership styles.

Table 3

Primary Leadership Styles

Primary Leadership Style	n	Percentage
S1: Telling	2	6
S2: Selling	18	55
S3: Participating	8	24
S4: Delegating	0	0
Tie (S1 and S3)	2	6
Tie (S2 and S3)	3	9

In analyzing the data from the LEAD Self survey, the primary leadership style of the total participants in the Selling or Participating quadrants was 88% or 29 of the 33 managers, which includes the tie between the two categories. This data demonstrates a large focus by the respondents which determines the leadership style of the mid-level

managers that completed the survey within the business units at an FFRDC. Eighteen of 33 or 55% of the participants have Selling as their primary leadership style. Eight of 33 or 37% of the participants reported Participating as their primary style. The Telling style had only 6% of the managers identifying that characteristic as their primary style.

Surprisingly, none of the participants had the Delegating style as their primary leadership style. Two of the survey results had a tie between two quadrants. First, there was a tie between the Telling and Participating styles for the participant's primary style, which indicated 6% response or two of the 33 surveys. Secondly, there was a tie between Selling and Participating styles, which had a 9% response or three of the 33 surveys.

The table below represents the frequency of the participant's secondary leadership style.

Table 4

Frequency Statistics for Secondary Leadership Styles

Secondary Leadership Style	n	Percentage
S1: Telling	4	12
S2: Selling	8	24
S3: Participating	9	27
S4: Delegating	3	9
Tie (S1 and S3)	3	9
Tie (S2 and S3)	3	9
Tie (S1 and S4)	3	9

In analyzing the data from the LEAD Self survey, the secondary leadership style again shows the total participants in the Selling or Participating quadrants was 60% or 20 of the 33 managers, which includes the tie between the two categories. With Selling and Participating the clear choice as the primary style along with the secondary style lending further support that those who took the survey clearly utilized this style of leadership. Nine of 33 or 27% of the participants had Participating as their secondary leadership style. Eight of 33 or 24% of the participants reported Selling as their secondary style. The Telling style had 12% of the managers identified that characteristic as their secondary style. Three of the participants or 9% had the Delegating style as their secondary leadership style. There were several ties in styles. First, there was a tie between the Telling and Participating styles for the participant's secondary style, which indicated 9% response or three of the 33 surveys. Secondly, there was a tie between Selling and Participating styles, which had a 9% response or three of the 33 surveys. Finally, there was a tie between the Telling and Delegating styles, which indicated a 9% response rate.

Leadership Style Range

Style range provides a sense for how flexible managers are in varying the types of behaviors when attempting to influence others. Style range refers to the number of quadrants in the situational leadership model in which there were two or more responses. Three or more responses in a quadrant indicate a high degree of flexibility in the use of behaviors in that particular leadership style. Two responses within the styles indicate moderate flexibility. One response in a quadrant was not considered statistically significant and therefore it is difficult to predict flexibility into that style. The style range was determined by calculating the number of leadership styles that had two or more

responses (Center for Leadership Studies, 2005). The table below demonstrates the leadership style range.

Table 5

Leadership Style Range

Range	n	Percentage
1 Quadrant	0	0
2 Quadrants	12	36
3 Quadrants	17	52
4 Quadrants	4	12

The leadership style range demonstrated that there were no participants that had only 1 quadrant with less than two responses. In other words, each of the participants utilized more than one style given a particular situation. The majority of the participants, 29 of 33, or 88% had a leadership style range of either two or three. Twelve percent demonstrated a leadership style range of four. The next table delves into the amount of flexibility that each manager surveyed possesses.

Table 6

Flexible Leadership Behavior

	Highly	Moderate	Not Significant
S1: Telling	11	7	15
S2: Selling	31	2	0
S3: Participating	25	4	4
S4: Delegating	4	8	21
Total	71	21	40

The above table indicates the level of flexibility of the participants surveyed. There were four quadrants in the Situational Leadership Model and there were 33 participants in this study which makes up 132 total quadrants. Fifty-four percent (71 of 132) of the participants indicated highly flexible behavior in using the leadership style. Additionally, as you can see, 79% (56 of 66) of the participants have highly flexible behavior in the Selling and Participating leadership styles. Also according to the survey data, there was a mixed amount of flexibility in the Telling style of leadership, as well as, an insignificant flexibility in the Delegating style.

Leadership Style Adaptability

Leadership Style Adaptability is the degree to which a manager can vary his or her style appropriately to meet the performance readiness level of the followers and the demands of a given situation (Center for Leadership Studies, 2005).

Leadership style adaptability was an important indicator in gaining insight into a manager's ability to influence others, and having the ability or range of styles is considered helpful. The style adaptability scores range from 0 to 36. The style adaptability scores were assigned to three levels: low (0-23), moderate (24-29), and high (30-36). The high level indicates a manager with a high degree of adaptability. He or she can accurately diagnose the ability and willingness of the followers for the situation and adjust accordingly. The moderate level reflects a moderate degree of adaptability. The low level indicates a need for the leader to improve their adaptability to the follower. A summary of the leadership style adaptability is in Table 7.

Table 7

Leadership Style Adaptability

Style Adaptability	n	Percentage
High	3	9
Moderate	17	52
Low	13	39

The figure above summarizes the survey data as 91% had a low to moderate ability to adapt their leadership style given the performance readiness of the follower. Only 9% had a high adaptability to the readiness of the follower.

The following table was an aggregate summation of the leadership style versus the performance readiness of the follower based on the total survey data.

Table 8

Leadership Style/Performance Readiness Matrix

S4	6.6% ^a	1.8% ^d	1.3% ^c	0% ^b
S3	9.8% ^d	9.6% ^a	9.3% ^d	3.3% ^c
S2	6.3% ^c	11.9% ^d	12.6% ^a	10.9% ^d
S1	2.3% ^b	1.8% ^c	1.8% ^d	10.9% ^a
	R4	R3	R2	R1

Note. The 'a' boxes indicate a high probability match according to the model. The 'b' boxes indicate that the selected response was very far from the high probability match given the leaders style selection and the follower's readiness level. The 'c' boxes indicated that there was a moderate distance between the participant's responses and the high probability match. The 'd' boxes demonstrated a close response to the high probability match based on the participant's response.

As a reminder for the categories of the above figure, *Telling* (S1), *Selling* (S2), *Participating* (S3), and *Delegating* (S4). This poses the leader's style which is best matched to the performance readiness level given a particular situation.

To better understand the readiness levels of the model, the following definitions are provided.

- *R1 – Low Capability and Low Motivation:* This is usually for new employee who does not have capabilities for a new position. Also, the level of motivation may be low, due to lack of knowledge (Center for Leadership Studies, 2005).
- *R2 – Low Capability and High Motivation:* This is typical for employee who wants to make progress on his position, but is missing some capabilities (Center for Leadership Studies, 2005).
- *R3 – High Capability and Low Motivation:* Experienced employees are sometimes lacking the morale (tiredness, too long time at the same position) (Center for Leadership Studies, 2005).
- *R4 – High Capability and High Motivation:* This is example of fully developed employees who have both the capability and motivation (Center for Leadership Studies, 2005).

In summary, 85.2% of the survey responses were either the high probability match or one step away from the high probability match, which are the 'a' and 'd' boxes in Table 8. This would indicate that generally good leadership styles were being used based on follower readiness.

Follow-up Interview Findings

All participants were asked if they would like to participate in a follow-up interview after completing the survey. Thirty-three managers completed the LEAD-Self survey and five, or 15% indicated that they would be interested in participating in a follow-up interview. All five of the managers were interviewed using the following questions. The questions were open ended by design in order to solicit dialog with the participants.

1. What do you feel are the top personal characteristics that led to your being promoted to your current position?
2. What leadership styles do you use that have been essential in your position?
3. Do you feel that your leadership characteristics align with the organization's culture?
4. Is there anything else you would like to add?

In analyzing the interview data gathered a thorough review of the transcribed interviews took place. The researcher reviewed the transcriptions looking for key characteristics or points made by the interviewee. The researcher then reviewed the data for themes or commonalities of the respondents. Performing this process facilitated the bucketing of the details of the data to determine patterns and categorization. Care was taken during the process of searching for patterns and categories to ensure the “plausibility of explanations” (McMillan & Schumacher, 2001, p. 480). As the researcher identified a group of common themes, the task was to tabulate all the interviews accurately. As the data was bucketed, the next phase was to determine the findings or

meaning of the data. A Microsoft Excel spreadsheet was utilized which assisted in clearly and accurately tracking the responses to the questions.

Interview Question 1

Question: What do you feel are the top personal characteristics that led to your being promoted to your current position?

The responses by the all of the participants were that they were very capable in their prior position; they indicated they were technically very strong in their field, and that they were able to effectively train employees or help them to grow in their careers. Four of the five described a personal strength in building teams or groups as a key factor in being promoted to their current position. Interviewee #5 stated, “I focus on building trust and empowering my team to achieve greatness.” Only 1 interviewee indicated integrity as a top characteristic.

Interview Question 2

Question: What leadership styles do you use that have been essential in your position?

The interpretation of this question was a bit more difficult, since the openness of the question allowed for many various adjectives that may or may not have similar meanings. Terms such as team focus, mutual respect, customer service and fulfilling the organization’s mission were used. Interviewee #2 stated, “Building the team in my group was a key element of my success.” Moving these terms into themes would allow for democratic leadership and servant leadership terms, which was clearly the case based on further explanation of the participants.

Interview Question 3

Question: Do you feel that your leadership characteristics align with the organization's culture? The responses to this question were fascinating from a researcher's point of view. Three of the participants responded that their leadership characteristics were not aligned with the organizations culture. Interviewee #4 stated, "Absolutely not, I grew up in a military family and was trained in the military, this is a tremendous adjustment for me." These participants then proceeded to discuss how their style varied from their direct manager's leadership style or their direct organizations leadership style. The other two answered yes and proceeded to explain how their style coincided with their direct boss or organizations leadership style. Interviewee #1, "I clearly understand this culture and fully embrace it." This question demonstrates the importance of the alignment between direct reports in the hierarchy of an organization. That is the perception of an individual if they align with the culture of an organization.

Interview Question 4

Question: Is there anything else you would like to add? All five participants answered no to this question and the interviews concluded.

Summary of Interviews

The value of the follow-up data was to corroborate the survey data, which the researcher feels did support the data. The interviews provided a safe, non-threatening environment for managers to express themselves. The data from each of the managers was complimentary, yet diverse enough to provide richness in supporting the researcher's conclusion.

Summary of the Research Question

Research Question: What are the most prevalent leadership characteristics of mid-level management, within the business divisions, at an FFRDC?

The following tables describe the primary and secondary leadership styles by the managers surveyed. Table 9 and Table 10 present the frequencies statistics for primary and secondary leadership styles based on the LEAD-Self survey.

Table 9

Frequency Statistics for Primary Leadership Styles

Primary Leadership Style	n	Percentage
S1: Telling	2	6
S2: Selling	18	55
S3: Participating	8	24
S4: Delegating	0	0
Tie (S1 and S3)	2	6
Tie (S2 and S3)	3	9

Table 10

Frequency Statistics for Secondary Leadership Styles

Secondary Leadership Style	n	Percentage
S1: Telling	4	12
S2: Selling	8	24
S3: Participating	9	27
S4: Delegating	3	9
Tie (S1 and S3)	3	9
Tie (S2 and S3)	3	9
Tie (S1 and S4)	3	9

It was a clear indication that the Selling was the primary style while the Participating style was the secondary style. The other styles were not nearly as represented in the data. The overall finding indicated that mid-level managers at an FFRDC reported utilizing primarily only two styles, Selling and Participating, as their primary or secondary leadership styles.

Chapter Summary

This chapter results obtained data from mid-level managers at an FFRDC who completed and returned a survey by the LEAD-Self instrument, as well as several follow-up interviews were conducted to corroborate the data gathered. Results were utilized to profile and compare leadership styles, leadership style range, and leadership adaptability along with analyzing interview feedback. Further discussion of the results is presented in Chapter 5.

Chapter 5. Discussion

This chapter summarizes the research including the purpose of the study, the problem statement, a recap of the research question, followed by conclusions developed from the analysis of the data in Chapter 4. This chapter also includes recommendations and suggestions for future research.

Summary of the Research

The purpose of this study was to define the leadership characteristics of mid-level management within the business divisions at an FFRDC. Expanding the knowledge of determining key leadership characteristics at an FFRDC will lay the foundation for further research studies at FFRDCs.

The problem was that there are many studies defining characteristics of business management within the private sector, however, there was very little literature on the nature of leadership characteristics of FFRDCs. Additionally, there were no known studies that define key characteristics of mid-level business managers within an FFRDC.

The research proposed to determine the leadership characteristics of mid-level business management at an FFRDC. Therefore, the following research question was explored: What are the most prevalent leadership characteristics of mid-level management, within the business divisions, at an FFRDC?

In order to address the research question, a survey instrument, the Hersey and Blanchard LEAD-Self instrument and an interview questionnaire were used for data gathering. The population in this study was 83 mid-level managers in an FFRDC. Thirty-three managers completed the survey. Additionally, there were five follow-up interviews

that took place entailing four questions that were open-ended which were designed to solicit thought provoking dialog.

Of the 83 surveys sent out, 33 managers returned completed survey forms ($n = 33$), yielding a response rate of approximately 40%. The researcher confirmed that all returned surveys were completed accurately. For analysis purposes, reports were generated using a Microsoft excel spreadsheet. Each respondent's LEAD-Self responses were analyzed for themes and an overall summary was generated to interpret the group as a whole. The resulting scores for primary and secondary leadership style, leadership style range, and leadership adaptability were also input into a Microsoft excel spreadsheet. The data collected was used to calculate the frequency distribution and percentage which were captured in Chapter 4 tables.

Review of Research Findings

The descriptive study of key characteristics of mid-level managers within the business divisions at an FFRDC yielded several important findings. For leadership style, the overall finding suggested that mid-level managers overwhelmingly utilize Selling (high task and high relationship) as a primary style and Participating (low task and high relationship) as a secondary style. Both of these leadership styles focus on maintaining high levels of relationships with followers which was corroborated with the follow-up interviews, touting customer service and servant leadership characteristics. These leadership styles tend to focus on teamwork and group dynamics with the followers, which was also a theme of the follow-up interviews. The two other leadership styles were Telling (high task and low relationship) and Delegating (low task and low relationship), which are both low relationship focused styles. The prevalence of the high relationship

characteristic may indicate that this style is a part of the fabric or culture of the business management organization.

The leadership style range refers to the extent to which an individual manager is able to vary his or her leadership style in different situations. The leadership style range demonstrates that there were no participants that had only one quadrant with less than two responses. In other words, each of the participants utilizes more than one style given a particular situation. The majority of the participants, 29 of 33, or 88% had a leadership style range of either two or three. Twelve percent demonstrated a leadership style range of four. The next table will delve into the amount of flexibility that each manager surveyed depicted.

Table 11

Flexible Leadership Behavior

	Highly	Moderate	Not Significant
S1: Telling	11	7	15
S2: Selling	31	2	0
S3: Participating	25	4	4
S4: Delegating	4	8	21
Total	71	21	40

The above table indicates the level of flexibility of the participants surveyed. There were four quadrants in the Situational Leadership Model and there were 33 participants in this study, which make up 132 total quadrants. As you can see, 79% (56 of 66) of the participants had highly flexible behavior in the Selling and Participating

leadership styles. Also according to the survey data, there was a mixed amount of flexibility in the Telling style of leadership, as well as, an insignificant flexibility in the Delegating style.

Leadership style adaptability was an important indicator in gaining insight into a manager's ability to influence others, and having the ability or range of styles is considered helpful. The style adaptability scores range from 0 to 36. The style adaptability scores are assigned to three levels: low (0-23), moderate (24-29), and high (30-36). The high level indicates a manager with a high degree of adaptability. He or she can accurately diagnoses the ability and willingness of the followers for the situation and adjust accordingly. The moderate level reflects a moderate degree of adaptability. The low level indicates a need for the leader to improve their adaptability to the follower. A summary of the leadership style adaptability is in the table below.

Table 12

Leadership Style Adaptability

Style Adaptability	n	Percentage
High	3	9
Moderate	17	52
Low	13	39

The table above summarizes the survey data as 61% have a high to moderate ability to adapt their leadership style given the performance readiness of the follower. Only 39% have a low adaptability to the readiness of the follower.

The following table was an aggregate summation of the leadership style versus the performance readiness of the follower based on the total survey data.

Table 13

Leadership Style/Performance Readiness Matrix

S4	6.6% ^a	1.8% ^d	1.3% ^c	0% ^b
S3	9.8% ^d	9.6% ^a	9.3% ^d	3.3% ^c
S2	6.3% ^c	11.9% ^d	12.6% ^a	10.9% ^d
S1	2.3% ^b	1.8% ^c	1.8% ^d	10.9% ^a
	R4	R3	R2	R1

Note. The 'a' boxes indicate a high probability match according to the model. The 'b' boxes indicate that the selected response was very far from the high probability match given the leaders style selection and the follower's readiness level. The 'c' boxes indicated that there was a moderate distance between the participant's responses and the high probability match. The 'd' boxes demonstrated a close response to the high probability match based on the participant's response.

In summary, 85.2% of the survey responses were either the high probability match or one step away. This would indicate that generally good leadership styles were being used based upon follower readiness.

Summary of the Research Question

What are the most prevalent leadership characteristics of mid-level management, within the business divisions, at an FFRDC?

The following tables describe the primary and secondary leadership styles by the managers surveyed. It was a clear indication that the Selling is the primary style while the Participating style was the secondary style. The other styles were not nearly as represented in the data. The overall finding indicated that mid-level managers at an

FFRDC reported utilizing primarily only two styles, Selling and Participating, as their primary or secondary leadership styles. As a manager in the business divisions of an FFRDC, if you would like to be successful with smart motivated people then you must treat them as a partner and collaborate with them according to the research.

The findings of key leadership characteristics of mid-level managers at an FFRDC suggests that the majority of them have leadership styles, flexibility range, and adaptability level appropriate to become effective managers within FFRDCs. Another finding is that individuals with Selling or Participating leadership style accompanied by moderate levels of flexibility along with teambuilding and a serving mentality would be an effective manager in a non-profit environment.

However, these qualities may not be enough to go from a good manager to an executive level leader in an FFRDC or non-profit environment today. According to Bennis and Nanus (1985), an environment of increasingly competitive global economy, leadership styles such as transformational leadership have become popular in many organizations.

Recommendations for Further Research

The researcher suggests further research on the executive level managers within the business divisions at an FFRDC for future study. A comparison of the two sets of data may provide data to determine characteristics for mid-level managers to achieve an executive level management position. Tools such as the LEAD-Self assessment are ideal tools for evaluating the criteria.

Chapter Summary

The purpose of this study was to conduct a descriptive study on key leadership characteristics of mid-level managers within the business divisions of an FFRDC.

Chapter 5 presented the summary of the research that included reiteration of the purpose of the research, significance of the study, and research question. The summary of findings was discussed and conclusions followed by suggestions for future research.

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APPENDIX A

Human Participant Protections Completion Certificate



APPENDIX B

Informed Consent Forms (Survey and Interview)

Kevin M. Caporicci

Date
Participant Name
Address

Dear _____,

Thank you for agreeing to participate in this study. Your participation is greatly appreciated and is also completely voluntary. The following information is provided to you to relate the process and procedures of the study.

The focus of the study will be determining the key leadership characteristics within the business organizations of a Federally Funded Research and Development Center (FFRDC). One of the possible benefits of this research is that the results will add to the field of study and knowledge of FFRDC leadership programs that exist today. Enclosed you will find chapter one of this study that I am providing to you to offer insight and information describing the problem, purpose, and research questions that define this effort.

You have been selected to participate in this study based upon a discrete set of criteria that has been established. As a participant, I will ask you to take a survey, which will consist of questions that are from a commercially available tool called LEADSelf. The survey should last no longer than 30 minutes and can be taken anytime your schedule permits. As this is not a work-related activity, the survey must not be conducted during normal work hours.

In an effort to provide full disclosure of the process that will be followed and also to comply with all of the applicable policies of Pepperdine University, I would like to advise you of the following:

- No compensation will be offered for participation in this study.
- Your identity (and the identity of the institution at which you are employed) will remain confidential. A pseudonym will be assigned to your transcription.
- You are free to withdraw from participation at any point of the process. Participation in the study is voluntary, and refusal to participate or discontinuing participation at any time will involve no penalty or loss of benefits to which you are otherwise entitled.
- There are no known risks to the participants associated with the process.
- If you are interested, the survey results will be sent to you for corroboration.
- The information provided will be published in the dissertation.

The university requires that you be apprised of, understand, and agree to the terms stated in this letter. Your participation in this survey will indicate your agreement of such. Please feel free to contact the researcher, dissertation advisor, or the IRB Chair with additional questions. Thank you in advance for your cooperation.

Sincerely,

Kevin M. Caporicci

SIGNATURE OF RESEARCH SUBJECT

I understand, to my satisfaction, the information in the consent form regarding my participation in the research project. All of my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research as described above.

Name of Subject

Signature of Subject

Date

APPENDIX C

Interview Protocol

Time of interview: _____

Date: _____

Place: _____

Respondent: _____

Recipient organization: _____

1. Introductory comments:
 - a. Thank participant
 - b. Explain the process including recording and note taking
 - c. Confirm receipt and understanding of the informed consent form. Ask if there are any questions.
2. Purpose of the study
3. Interview Questions
 - a. What do you feel are the top personal characteristics that led to your being promoted to your current position?
 - b. What leadership styles do you use that have been essential in your position?
 - c. Do you feel that your leadership characteristics align with the organization's culture?
 - d. Is there anything else you would like to add?
4. Closing
5. Review procedures for verification of transcription by participant.
6. Thank you

APPENDIX D

Expert Panel Letter

Name of Expert: _____
 Organization: _____
 Address: _____

Dear _____,

Thank you for your willingness to participate on the panel of experts for the purpose of validating my interview questions. The purpose of this validation procedure is to ensure the interview questions provide data to answer the research questions of the study and will lead to the fulfillment of the purpose of the study.

As expressed in chapter one of the dissertation that I enclosed, the purpose of this study is to determine the key leadership characteristics within the business organizations at a Federally Funded Research and Development Center (FFRDC). I will interview ten supervisory and section level managers at a FFRDC to solicit and collect their opinions regarding this topic.

Based upon your expertise, I am requesting that you evaluate my interview questions in the context of providing data to answer the research questions in the study. The goal of the research is to allow the respondents to answer the questions using their own experiences as references.

Please use the enclosed review form to express your opinions and return in the self-addressed, stamped envelope. Next to each question, a rating scale is provided. Please circle the appropriate number that represents your response: (1) represents the question as “relevant” in relation to the research question as stated; (2) represents the question to be “not relevant” in relation to the research question as stated; and (3) represents a modification as shown in the space provided below the question. Also, at the end of the form there is room for additional comments.

Please feel free to contact me with any questions that you may have regarding this process. I may be reached at either my home or cell phone. I look forward to your response.

Thank you for your time and consideration in helping me to complete this important phase of my study.

Sincerely,

Kevin M. Caporicci

APPENDIX E

Expert Panel Review Form

Please circle the appropriate number in the rating scale column indicating that in relation to the research question, the interview question is (1)Relevant; (2)Not Relevant; or (3)Should be modified as suggested.

Research Question Interview Question Rating

1. What are the top personal characteristics that led to your being promoted to your current position?

(1)Relevant; (2)Not Relevant; (3)Modify as Shown

Modify as follows _____

2. What leadership styles do you use that have been essential in your position?

(1)Relevant; (2)Not Relevant; (3)Modify as Shown

Modify as follows _____

3. Do you feel that your leadership characteristics align with the organizations mission?

(1)Relevant; (2)Not Relevant; (3)Modify as Shown

Modify as follows _____

4. Is there anything else you would like to add?

(1)Relevant; (2)Not Relevant; (3)Modify as Shown

Modify as follows _____

APPENDIX F

LEAD-Self Instrument

**LEAD
Self****Leadership Style/Perception of Self**

Purpose

This instrument is used to evaluate the leadership behaviors you use when you are engaged in attempts to influence the actions and attitudes of others. The information gathered with the LEAD Self provides insight into your current strengths and areas for your leadership skill development. It supplies information about which leadership behaviors you use and the extent to which you match those behaviors to the needs of others.

Instructions-Using the Instrument

- Assume you are involved in each of the following twelve situations. Each situation has four alternative actions you might initiate.
- Read each item carefully.
- Think about what you would do in each circumstance.
- Circle the letter of the alternative action choice you think most closely describes what behavior you would use in the situation presented.
- Circle only one choice.
- Circle a choice for each of the twelve situations. Don't skip any.
- Move through the items quickly and stick with the first choice you make on each item. Your first choice tends to be the most accurate one.

Reminder: Circle what you think you would do, not what you should do. The goal is to evaluate what behaviors you actually use-not to get right answers. If there is no alternative action that describes what you would do in the situation, circle the item that most closely resembles what you would do.

Leadership Effectiveness & Adaptability Description

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1. SITUATION	ALTERNATIVE ACTIONS
Your followers are not responsible lately to your friendly conversation and obvious concern for their welfare. Their performance is declining rapidly.	<i>You would...</i> A. Emphasize the use of uniform procedures and the necessary for task accomplishment. B. Make yourself available for discussion but not push your involvement. C. Talk with followers and then set goals. D. Intentionally not intervene.

2. SITUATION	ALTERNATIVE ACTIONS
The observable performance of your group is increasing. You have been making sure that all members were aware of their responsibilities and expected standards of performance.	<i>You would...</i> A. Engage in friendly interaction, but continue to make sure that all members are aware of their responsibilities and expected standards of performance. B. Take no definite action. C. Do what you can to make the group feel important and involved. D. Emphasize the importance of deadlines and tasks.

3. SITUATION	ALTERNATIVE ACTIONS
Members of your group are unable to solve a problem. You have normally left them alone. Group performance and interpersonal relations have been good.	<i>You would...</i> A. Work with the group and together engage in problem solving. B. Let the group work it out. C. Act quickly and firmly to correct and redirect. D. Encourage the group to work on the problem and be supportive of their effort.

4. SITUATION	ALTERNATIVE ACTIONS
You are considering a change. Your followers have a fine record of accomplishment. They respect the need for change.	<i>You would...</i> A. Allow group involvement in developing the change, but not be too directive. B. Announce changes and then implement

	<p>with close supervision.</p> <p>C. Allow the group to formulate its own direction.</p> <p>D. Incorporate group recommendations, but direct the change yourself.</p>
--	---

5. SITUATION	ALTERNATIVE ACTIONS
<p>The performance of your group has been dropping during the last few months. Members have been unconcerned with meeting objectives. Redefining roles and responsibilities has helped in the past. They have continually needed reminding to have their task done on time.</p>	<p><i>You would...</i></p> <p>A. Allow the group to formulate its own direction.</p> <p>B. Incorporate group recommendations, but see that</p> <p>C. Redefine roles and responsibilities and supervise carefully.</p> <p>D. Allow group involvement in determining roles and responsibilities, but not be too directive.</p>

6. SITUATION	ALTERNATIVE ACTIONS
<p>You stepped into an efficiently run organization. The previous administrator tightly controlled the situation. You want to maintain a productive situation, but would like to begin humanizing the environment.</p>	<p><i>You would...</i></p> <p>A. Do what you can to make the group feel important and involved.</p> <p>B. Emphasize the importance of deadlines and tasks.</p> <p>C. Intentionally not intervene.</p> <p>D. Get the group involved in decision making, but see that objectives are met.</p>

7. SITUATION	ALTERNATIVE ACTIONS
<p>You are considering changing to a structure that will be new to your group. Members of the group have made suggestions about needed change. The group has been productive and demonstrated flexibility in its operation.</p>	<p><i>You would...</i></p> <p>A. Define the change and supervise carefully.</p> <p>B. Participate with the group in developing the change, but allow members to organize the implementation.</p> <p>C. Be willing to make changes as recommended, but maintain control of implementation.</p> <p>D. Avoid confrontation; leave thing alone.</p>

8. SITUATION	ALTERNATIVE ACTIONS
Group performance and interpersonal relations are good. You feel somewhat insecure about your lack of direction of the group.	<p><i>You would...</i></p> <p>A. Leave the group alone.</p> <p>B. Discuss the situation with the group and then initiate necessary changes.</p> <p>C. Take steps to direct followers toward working in a well-defined manner.</p> <p>D. Be supportive in discussing the situation with the group, but not too directive.</p>

9. SITUATION	ALTERNATIVE ACTIONS
Your boss has appointed you to head a task force that is far overdue in making requested recommendations for change. The group is not clear on its goals. Attendance at sessions has been poor. Their meetings have turned into social gatherings. Potentially, they have the talent necessary to help.	<p><i>You would...</i></p> <p>A. Let the group work out its problem.</p> <p>B. Incorporate group recommendations, but see that objectives are met.</p> <p>C. Redefine goals and supervise carefully.</p> <p>D. Allow group involvement in setting goals, but not push.</p>

10. SITUATION	ALTERNATIVE ACTIONS
Your followers, usually able to take responsibility, are not responding to your recent redefining of standards.	<p><i>You would...</i></p> <p>A. Allow group involvement in redefining standards, but not take control.</p> <p>B. Redefine standards and supervise carefully.</p> <p>C. Avoid confrontation by not applying pressure; leave the situation alone.</p> <p>D. Incorporate group recommendations, but see that new standards are met.</p>

11. SITUATION	ALTERNATIVE ACTIONS
You have been promoted to a new position. The previous supervisor was uninvolved in the affairs of the group. The group has adequately handled its tasks and direction. Group interrelations are good.	<p><i>You would...</i></p> <p>A. Take steps to direct followers working in a well defined manner.</p> <p>B. Involve followers in decision making and reinforce good contributions.</p> <p>C. Discuss past performance with the group and then examine the need for new</p>

	practices. D. Continue to leave the group alone.
--	---

12. SITUATION	ALTERNATIVE ACTIONS
Recent information indicates some internal difficulties among followers. The group has a remarkable record of accomplishment. Members have effectively maintained long-range goals. They have worked in harmony for the past year. All are well qualified for the task.	<i>You would...</i> A. Try out your solution with followers and examine the need for new practices. B. Allow group members to work it out themselves. C. Act quickly and firmly to correct and redirect. D. Participate in discussion of problem while providing support for followers.

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APPENDIX G

Business Division Organization

Business Management

Division Managers	7
Section Managers	31
Group Supervisors	67

APPENDIX H

Human Resources Approval to Survey/Interview

Caporicci, Kevin M (2 [redacted])

From: Ha [redacted]
Sent: Thursday, October 04, 2012 1:31 PM
To: Caporicci, Kevin M (2 [redacted])
Subject: Re: Site Approval

Permission granted.

Cozette Hart

Sent from my iPhone

On Oct 4, 2012, at 3:00 PM, "Caporicci, Kevin M (26 [redacted] kevin.m.caporicci@jpl.nasa.gov)" wrote:

Cozette,

I am a doctoral student at Pepperdine University working on my dissertation. The Pepperdine University Institutional Review Board requires site permission for me to conduct my dissertation research. I'm writing to obtain site permission to survey and interview supervisors and managers at JPL. The surveys and interviews will not take place during regular JPL work hours. The employee's participation is completely voluntary and the information related to the subjects and the organization will remain confidential. Your affirmative reply to this email will satisfy the Pepperdine requirement.

Regards,

Kevin Caporicci