



Transformational Leadership and its Relationship to Employee Job Motivation at the TACOM-LCMC

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Abstract

The purpose of this study was to determine if employee job motivation increased when first-line supervisors embraced and exhibited Transformational Leadership skills within five TACOM- Life Cycle Management Command (LCMC) subordinate organizations [TACOM Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO Combat Support and Combat Service Support (CS&CSS), and PEO Ground Combat Systems (GCS)]. This research also determines if the employee's gender, age group, and/or years of civilian government service moderates the effects of Transformational Leadership on employee job motivation. These five subordinate organizations served as the primary stakeholders for this research and their workforce of approximately 4,820 employees. The survey responses received equated to 437; 32 responses contained insufficient data for analysis responses. The completed survey responses used for the statistical analysis equated to 405; 142 of these responses came from other organizations located on Detroit Arsenal. The researcher developed questions related to Transformational Leadership characteristics, which measured the extent to which first-line supervisors exhibited the following four primary dimensions of Transformational Leadership: idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. The researcher also developed questions related to these four primary dimensions of Transformational Leadership to gauge the employees' level of job motivation and to determine if gender, age group, and/or years of civilian government service moderate the impacts of transformational leadership on employee's job motivation.

The primary research findings affirmed a statistically significant relationship existed between Transformational Leadership and employee job motivation. For each point Transformational Leadership increased, employee job motivation increased by approximately 0.85

points. The research also concluded that no statistically significant relationship exists between Transformational Leadership and the moderating variables of gender, age group, and/or years of civilian government service.

Chapter 1 - Introduction

Many challenges are affecting the workforce and hampering productivity at the TACOM-Life Cycle Management Command's (LCMC), Detroit Arsenal, MI. Several distractors exist, to include a potential government shutdown, workforce downsizing, and increasing workloads. Today's budget constraints mandate that TACOM-LCMC do more with diminishing resources. These pressures escalate workplace stress and increase employee turnover within TACOM-LCMC and its subordinate organizations. While TACOM-LCMC's first-line supervisors cannot affect the status of the federal budget, their leadership style may lessen the impacts of these mounting pressures, increase productivity, and reduce employee turnover. The researcher used an organizational climate survey related to Transformational Leadership and employee job motivation to conduct this research. This research paper analyzes the survey instrument's data results to determine if a rationalization exists to initiate a change process aimed at incorporating Transformational Leadership into the leadership styles of TACOM-LCMC's first-line supervisors. The change process includes the intervention methodology, diagnostic models, the tools needed to implement Transformational Leadership, and identify the method for measuring results.

The world's challenges are exponentially becoming more complex, interconnected, threatening, and evolving faster. Leaders must adapt their leadership styles to address these emerging global issues. Leaders must sufficiently manage the expectations of different stakeholders. Increasingly, teams are not geographically collocated; they interact via audio, video conferencing, or through other virtual means. An organization's senior leadership must not only manage its organization's business matters, but it must also transform the organization for the future (Hawkins, 2011). The TACOM-LCMC's primary stakeholders include the Joint Services (Army, Air Force, Navy, and Marine Corps), various Program Executive Offices (PEO),

Engineering, Contracting, the Training and Doctrine Command (TRADOC), combat developers, the War Fighters, and various subordinate organizations. While working to meet the requirements of the Joint Services, points of contention often arise because of the conflicting interests of the various stakeholders.

Transformational Leadership causes individuals and social systems to change; the desired end state being a valuable and positive change resulting in the individuals transforming from followers into leaders (Langston University, 2015). Through a variety of means, Transformational Leadership enhances the motivation, morale, and performance of followers. Transformational Leaders are able to connect a follower's sense of identity to the organization's mission and values. They inspire their followers as role models and challenge them to take greater ownership for their assignments. Transformational Leaders strive to understand their followers' strengths and weaknesses, which allows them to better align work assignments that optimize their performance (Langston University, 2015). Hawkins (2011) referenced Philip Sadler's Transformational Leadership definition, that it is "the process of engaging the commitment of employees to radically change in the context of shared values and a shared vision" (Hawkins, 2011, p. 10). Transformational Leadership "occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group" (Bass B. M., 1990, p. 21). Hawkins further defines Transformational Leadership as the process of collectively engaging the commitment and participation of all major stakeholders groups to change in the context of shared endeavor, values, and vision (Hawkins, 2011). Hawkins (2011) suggests that leaders need to embrace Transformational Leadership to develop high performing teams. Followers view Transformational Leaders as change agents, driven by strong

values, lifelong learners, visionaries, and capable of coping with complexity, uncertainty, and ambiguity (Hawkins, 2011).

Transactional Leadership emphasizes the exchange between the leader and followers to achieve an expected outcome. The quality of the follower’s performance determines whether they are rewarded or punished. As inferred in Table 1, Transactional Leadership relies on contingent reinforcement; the action could be positive, negative, or passive in nature (Avolio & Bass, 2002).

Research conducted since the 1980’s corroborates the idea that Transformational Leadership is more effective than Transactional Leadership (Avolio & Bass, 2002). The research indicates that Transformational Leadership motivates followers to exert more effort, increase commitment, and realize increased employee job motivation, performance, and job satisfaction (Avolio & Bass, 2002). Figure 1 illustrates the add-on effect of Transformational Leadership.

Add-on Effect of Transformational Leadership

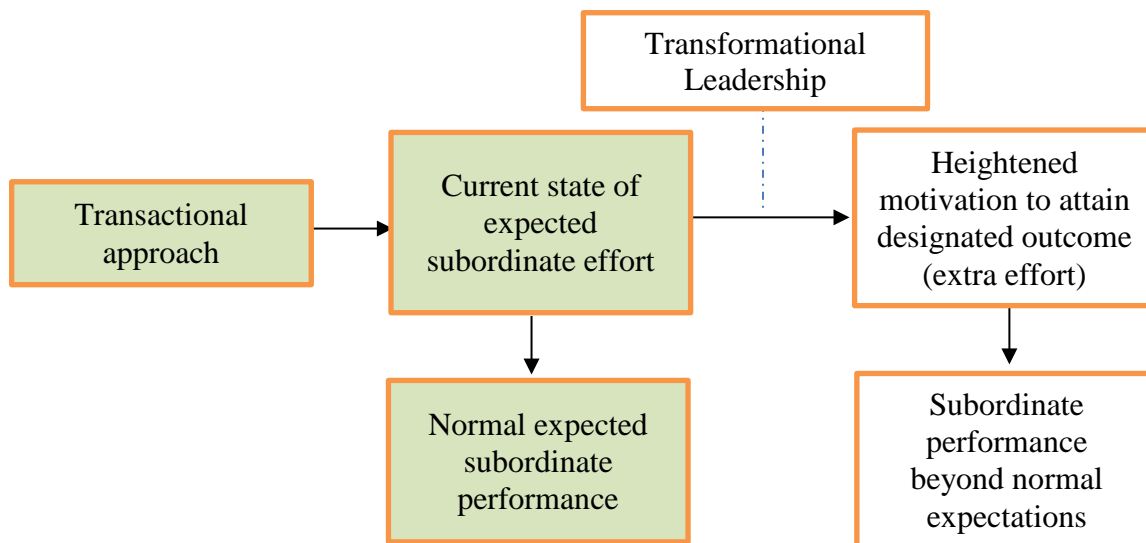


Figure 1: Add-on Effect of Transformational Leadership {NOTE: Adapted from (Stajkovic, 2010)}

Transformational Leadership augments Transactional Leadership in that its effectiveness is limited unless elements of Transformational Leadership are implemented to achieve the most

from the transactions. Followers need to feel valued, that their work has meaning, and they need to take ownership of their work (Avolio & Bass, 2002). The following figure illustrates how Transactional Leadership augmented by Transformational Leadership produces exceptional performance.



Figure 2: Transactional Leadership + Transformational Leadership = Exceptional Performance {NOTE: Copied from (Donahue, 2013)}

The table below reflects the characteristics of Transformational Leadership and Transactional Leadership.

Table 1: *Characteristics of Transformational and Transactional Leaders* {NOTE: Adapted from (Bass B. M., 1990)}

<u>TRANSFORMATIONAL LEADER</u>
Individualized Influence (charisma): Capable of instilling a sense of vision and mission; stimulates pride, gains, trust and respect.
Inspirational: Sets high expectations, focuses efforts through symbols, expresses importance using simple methods.
Intellectual Stimulation: Encourages thinking intelligently and rationally, and cautious problem solving.
Individualized Consideration: Personally attentive, a coach, an advisor, and treats employees individually.
<u>TRANSACTIONAL LEADER</u>
Contingent Reward: an expectation of rewards for efforts, assures rewards for good performance, accomplishments recognized.
Management by Exception (active): Monitors for deviations from rules and standards; initiates corrective action.
Management by Exception (passive): Intervenes only if standards are subpar.
Laissez-Faire: Relinquishes responsibilities, avoids decision making.

During the initial introduction of Transformational Leadership to organizations, leaders often encounter resistance to change. Examples of resistance to change include struggles between the forces to stability and change, denial and acceptance of reality, and lastly, manager and leader (Tichy & Devanna, 1986).

- Stability and Change: Organizations must be cognitive of the need to balance the need for change with the need for stability.

- Denial and Acceptance of Reality: Progress is hindered when protagonist attempt to deny reality or its implications.
- Manager and Leader: Managers tend to maintain the status quo, while leaders often strive for change. “Tension arises between doing things right and doing the right things” (Tichy & Devanna, 1986, p. 28)

* Bulleted list adapted from (Tichy & Devanna, 1986)

Background

Research results indicate that relationships may exists between employee job motivation and the demographics of the workforce. A particular leadership style’s effectiveness may relate to the employee’s years of civilian government service. The following figures depict data related to the years of service of employees within TACOM’s Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO Combat Support and Combat Service Support (CS&CSS), and PEO Ground Combat Systems (GCS).

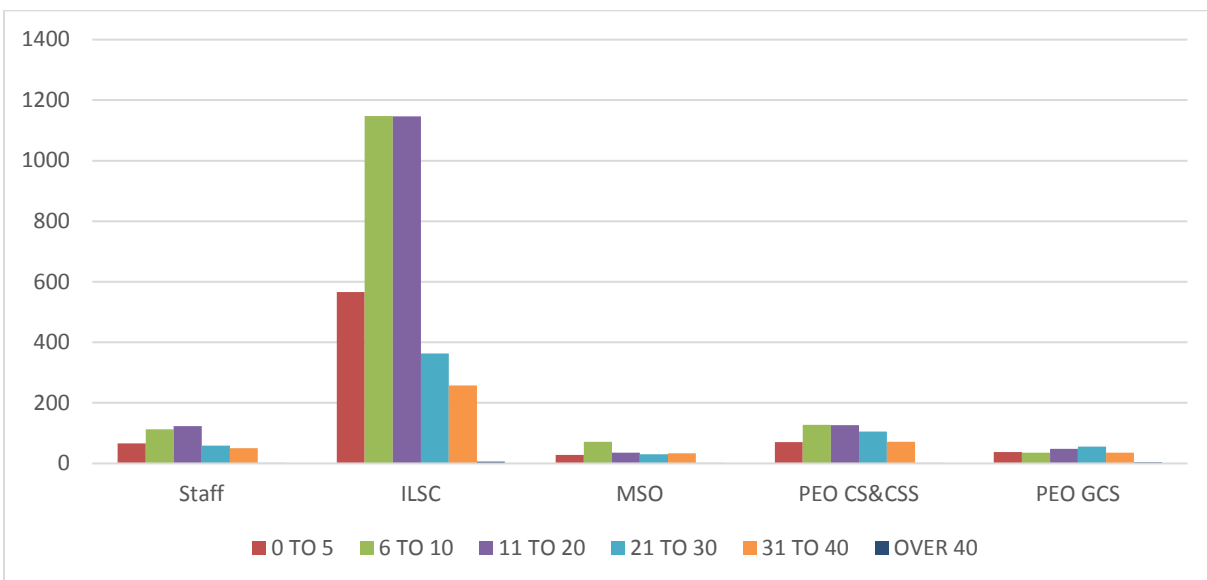


Figure 3: Years of Service {NOTE: Adapted from (TACOM-LCMC G1, 2015)}

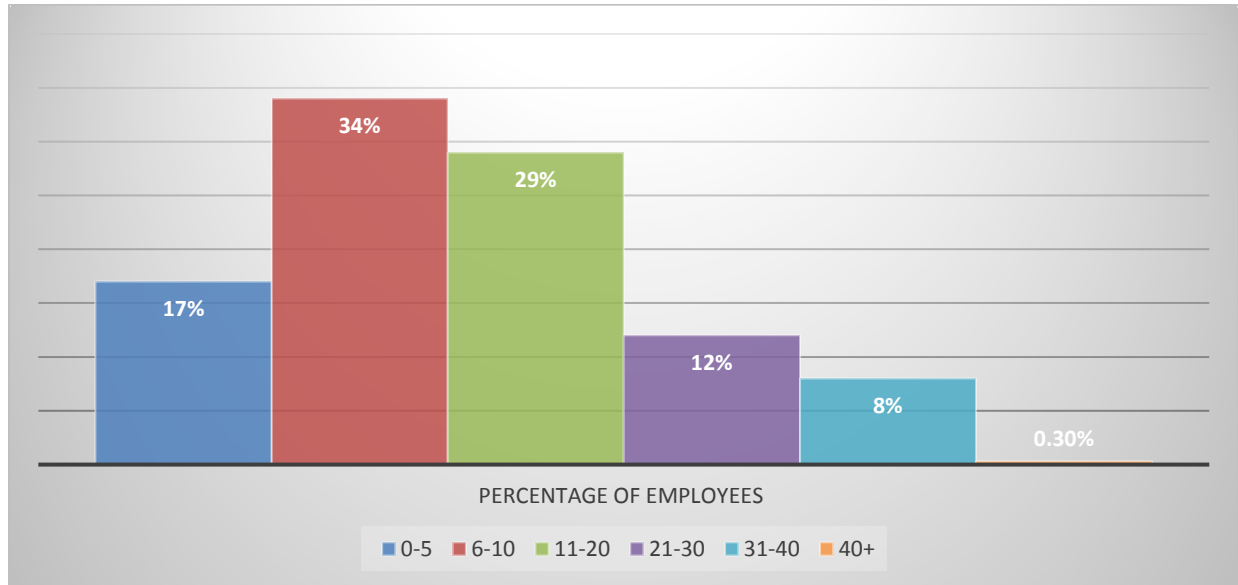


Figure 4: TACOM-LCMC Workforce Experience {NOTE: Adapted from (TACOM-LCMC G1, 2015)}

Figure 3 depicts that the workforce primarily belongs to the ILSC and the years of service breakdown between the various organizations. Figure 4 depicts TACOM workforce years of experience percentage data. At the TACOM-LCMC, approximately 47 percent of the workforce has ten years or less work experience as Department of Army Civilians.

It was thus imperative to study the effectiveness of the leadership of TACOM’s first-line supervisors on employee job motivation. The potential exists that these leaders may greatly influence the employee job motivation of junior employees. The results of such a study would identify areas for increased leadership training and focus. The TACOM-LCMC experienced a surge in hiring requirements, beginning in 2004. This resulted from retirements, attrition, and the Base Realignment and Closure (BRAC) decision in 2005.

It was essential to study how the leadership styles of TACOM’s first-line supervisors influence the work environment and the motivation of their employees. A first-line supervisor’s leadership style can either hamper or foster motivation and productivity. The effectiveness of

integrated product teams is an example of an area of concern within the ILSC. Many first-line supervisors are not experienced in leading integrated product teams that consists of multiple disciplines, particularly those that are not geographically collocated. These leaders have profound influence on team cohesion. Mistrust among stakeholders may emerge, and affect the work environment and the motivation level of junior team members. The prevalent leadership style can affect the performance of the integrated product team. Examples of how leadership styles affect integrated product teams include:

- Lack of accountability – results in poor performance, unpreparedness, poor quality
- Abrasive communication- results in members reduced participation
- Hostile Environments – fear of retaliation

Purpose of this Study

The purpose of this study was to determine if employee job motivation increased when first-line supervisors embraced and exhibited Transformational Leadership skills within five TACOM-LCMC subordinate organizations (TACOM Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS). This research also determines if the employee's gender, age group, and/or years of civilian government service moderates the effects of Transformational Leadership on employee job motivation. The person's gender was considered because studies have shown that gender biases still exist and that women tend to be more people based in their leadership styles. The employee's age group was considered because this may relate to the stage of an individual's career and career goals; it may also relate to maturity. Consideration was given to the number of years of civilian government service because

studies have shown that a person's length of service may indicate the effectiveness of different motivation types or the individual's motivation to work in certain leadership environments.

Conceptual Model

A conceptual model relating Transformational Leadership to employee job motivation may be developed by evaluating the four fundamental dimensions of Transformational Leadership and the job factors related to employee job motivation. The conceptual model also has three moderating variables: the employee's gender, age group, and years of civilian government service. The four dimensions of Transformational Leadership measured were idealized influence (charisma), inspirational motivation, intellectual stimulation, and individual consideration. The first characteristic, idealized influence (charisma) relates to providing a vision, a sense of mission, pride, trust, and respect. Next, inspiration leadership relates to setting high expectations, making assignments challenging and meaningful, using symbols to focus efforts, and communicating purposes/objectives effectively. Intellectual stimulation relates to promoting intelligence, rationality, and critical thinking. The last characteristic, individualized consideration refers to giving employees personal attention, coaching, advice, and treating each of them individually (Bass B. M., 1990; Walumbwa, Orwa, Wang, & Lawler, 2005).

Tietjen and Myers (1998) referenced Herzberg's belief that the best way for a leader to understand an employee's attitude is to understand what motivates the individual. The following intrinsic job motivators measure employee job motivation: job duties, achievement, responsibility, and career opportunities (Tietjen & Myers, 1998). Motivators result in positive employee attitudes because they lead to the fulfillment of their ultimate goal, self-actualization, in accordance with Maslow's hierarchy of needs (Tietjen & Myers, 1998). This study determined if Transformational Leadership has a statistically significant impact on employee job motivation and to what degree

gender, age group, and/or years of civilian government service moderate its effects on employee job motivation. Figure 5 reflects the conceptual model for this study.

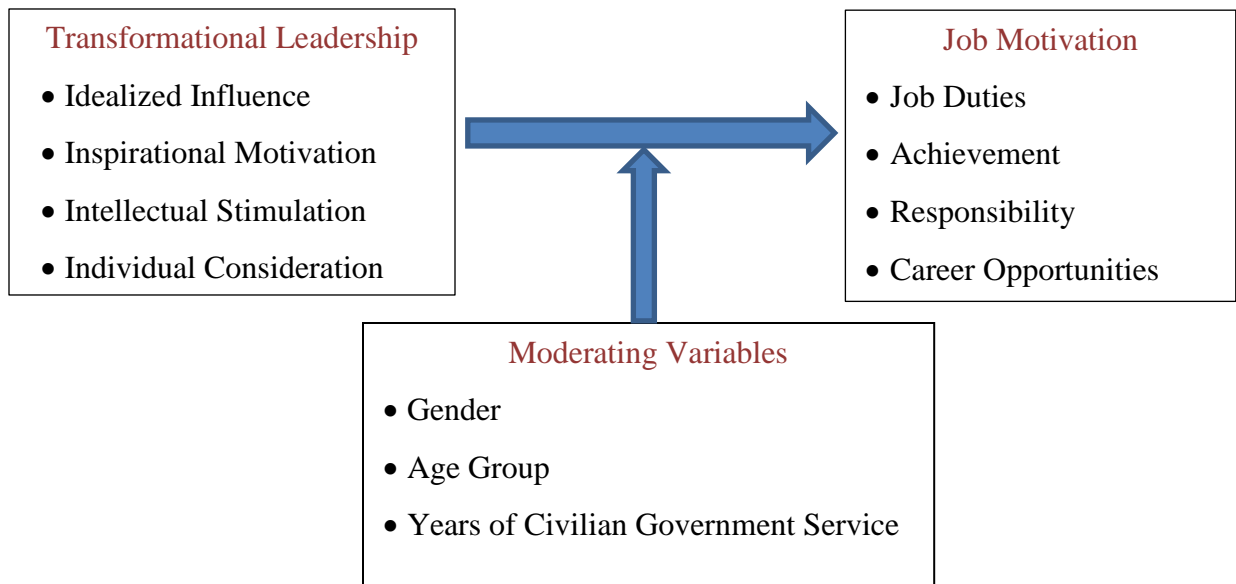


Figure 5: Conceptual Model of Transformational Leadership and Employee Job Motivation.

Research Questions:

This research paper addresses five questions related to the effects of Transformational Leadership on TACOM-LCMC employee job motivation:

- a) Do TACOM-LCMC's first-line supervisors exhibit Transformational Leadership characteristics?
- b) Does Transformational Leadership affect employee job motivation?
- c) Does the employee's gender moderate the impact of Transformational Leadership on employee job motivation?
- d) Does an employee's age moderate the impact of Transformational Leadership on employee job motivation?
- e) Does the length of civilian government service moderate the impact of Transformational Leadership on employee job motivation?

Research Hypotheses

The four hypotheses tested are:

- (H₀₁): Transformational Leadership does not affect employee job motivation.
- (H₀₂): The gender of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₃): The age group of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₄): The employee's years of civilian government service does not affect the impacts of Transformational Leadership on employee job motivation.

Objectives and Outcomes

The primary objective of this research was to identify the impact that Transformational Leadership has on employee job motivation. The results of the survey will be provided to the TACOM-LCMC Commanding General and the Board of Directors for use in developing a change initiative aimed at improving overall employee job motivation.

Significance of This Research

It is imperative in this financially austere environment, that TACOM's first-line supervisors effectively lead their personnel by increasing workplace productivity. A first-line supervisor's ability to lead in a transformational manner and the effects of Transformational Leadership on employee job motivation were the primary focus areas for this research.

Overview of the Research Methodology

The quantitative data collected from the survey measures the level of Transformational Leadership existing in the TACOM-LCMC and employee job motivation within the organization. The questions on Transformational Leadership measured the extent to which first-line supervisors

exhibited the four primary dimensions of Transformational Leadership; idealized influence (charisma), inspirational motivation, intellectual stimulation, and individual consideration. The researcher developed questions related to the four primary dimensions of Transformational Leadership to gauge the employees' level of job motivation and to determine if the results moderate because of their gender, age group, and/or years of civilian government service. The researcher used regression and hierarchical regression to analyze the moderating variables (gender, age group, and years of civilian government service) to ascertain if the demographics have a statistically significant effect on Transformational Leadership's influence on employee job motivation.

Limitations of the Study

The results of the survey derived from TACOM-LCMC employees within five TACOM-LCMC subordinate organizations [TACOM Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS] and may not be applicable to other organizations at the Detroit Arsenal. The answers to the survey were the employee's perception of their leader's transformational skills, and their level of employee job motivation, and thus may be subject to individual bias.

Chapter 2 - Literature Review

Introduction

This chapter reviewed literature on Transformational Leadership and its impact on employee job motivation in the workplace. TACOM-LCMC leaders are increasingly being asked to accomplish more with fewer resources. While it is imperative for leaders to accomplish their assigned missions, it is equally important that leaders strive to increase workforce motivation. Motivated employees exhibit passion towards their work and are committed to their jobs and organizations. Federal workers that are motivated about their jobs tend to possess the willingness to perform above their job descriptions for the benefit of the public they support (U.S. Merit Systems Protection Board, 2012). As referenced in Chapter 1, leaders must adapt their leadership styles to adequately address these emerging global issues, while effectively managing the expectations of all their different stakeholders. It is just as important that leaders strive to effectively motivate the workforce to maximize productivity and efficiency in the organizations. This literature review is derived from books, articles, peer-reviewed journal articles, and studies.

Transformational Leader Theory

Transformational Leaders seek to uplift the morale, motivation, and morals of their followers, whereas transactional leaders use rewards and punishments to gain compliance (Bass B. M., 1990). Additionally, Transformational Leaders influence employees by changing goals from emphasizing personal interest towards self-actualization and the greater good; increasingly, employees become motivated to avoid disappointing the leader (Reuvers, van Engen, Vinkenbunrg, & Wilson-Evered, 2008).

The transformational leader works to increase employee loyalty to the organization and to develop employees that work independently and take ownership of assigned projects. Proper

implementation of Transformational Leadership results in employees desiring to become organizational assets and to advance the organization, whereas transactional leaders enhance an environment where employees seek organizational benefits as their primary motivation (Bass B. , 1999). Bernard Bass (1999) noted that changes in the workplace and workforce have increased the need for leaders to become more transformational versus transactional to remain effective. Bernard Bass (1999) notes, in addition to the previously mentioned benefits, that Transformational Leadership develops employees that feel empowered. This results in increased job satisfaction, project ownership, and productivity; teams focus on increasing efficiency, customer-focused support, and cost effectiveness (Bass B., 1999).

The Importance of Effective Leadership

In his article, Bass (1999) notes how the post-Cold War era emphasizes the need for flexibility in employees, teams, and organizations; and a reduced need for unskilled labor in the United States due to automation and out sourcing. Today's job market is very competitive and requires candidates with increased education and training. It is commonplace now for teams to consist of educated professionals. Bass notes in this article how the supervisory pyramid is flattening; professionals increasingly view themselves as peers and colleagues rather than the normal leader and subordinate relationship (Bass B., 1999).

The Dimensions of Transformational Leadership

There are four dimensions of Transformational Leadership, as illustrated in the figure below:

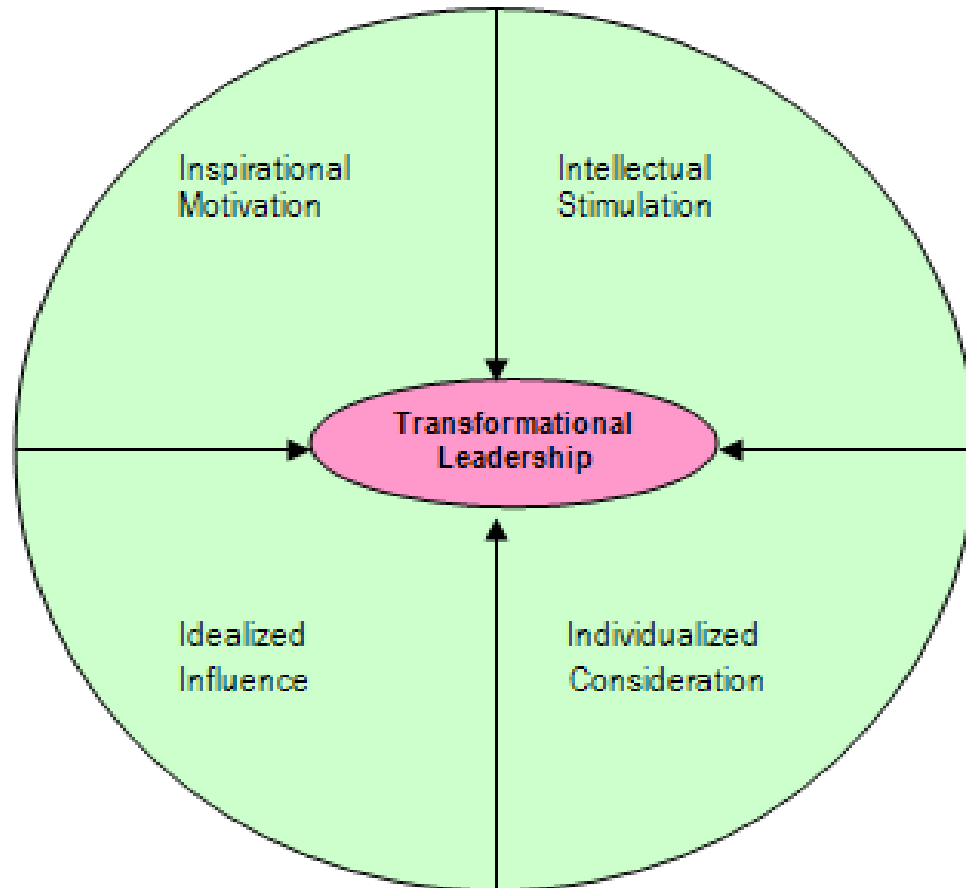


Figure 6: Four Dimensions of Transformational Leadership {NOTE: Reprinted from (Vserve Management Systems, 2013)}

- **Individualized Consideration** – relates to the leader’s efforts to (Vserve Management Systems, 2013) support, mentor, or coach their followers and acknowledge the follower’s concerns and needs. The leader challenges the followers and keeps the lines of communication open. The leader celebrates the contributions of followers and fosters an environment of mutual respect. The followers become motivated to seek self-development opportunities and show increased intrinsic motivation for their assignments (Langston University, 2015).

- **Intellectual Stimulation** – relates to the leader’s willingness to take risks, solicit follower’s ideas, and challenge assumptions. Leaders with this style encourage followers to think

independently and creatively. The followers begin to ask more questions and think more deeply, which results in more creative ways to execute their assignments (Langston University, 2015).

- **Inspirational Motivation** – relates to the leader’s ability to articulate a vision that appeals and inspires followers. Inspirational leaders challenge followers with high standards, communicate confidence about goals, and make assignments meaningful. Often to be motivated to invest more effort, followers require a strong sense of purpose (Langston University, 2015).
- **Idealized Influence** (charisma) – relates to a leader’s ability to instill pride, earn respect and trust, as well as, serve as a role model for high ethical behavior. These traits result in increased support and admiration from the leader’s followers (Langston University, 2015).

Drivers of Employee Job Motivation

Tietjen and Myers (1998) referenced Herzberg’s belief that the best way for a leader to understand an employee’s attitude is to understand his/her motivation. The research assesses employee job motivation through a series of survey questions related to the following intrinsic job motivators: job duties, achievement, responsibility, and career opportunities (Tietjen & Myers, 1998). Figure 7 below communicates some of the differences in workplace characteristics that exist between the various generations:

WORKPLACE CHARACTERISTICS				
	Veterans (1922–1945)	Baby Boomers (1946–1964)	Generation X (1965–1980)	Generation Y (1981–2000)
Work Ethic and Values	Hard work Respect authority Sacrifice Duty before fun Adhere to rules	Workaholics Work efficiently Crusading causes Personal fulfillment Desire quality Question authority	Eliminate the task Self-reliance Want structure and direction Skeptical	What's next Multitasking Tenacity Entrepreneurial Tolerant Goal oriented
Work Is ...	An obligation	An exciting adventure	A difficult challenge A contract	A means to an end Fulfillment
Leadership Style	Directive Command-and-control	Consensual Collegial	Everyone is the same Challenge others Ask why	*TBD
Interactive Style	Individual	Team player Loves to have meetings	Entrepreneur	Participative
Communications	Formal Memo	In person	Direct Immediate	E-mail Voice mail
Feedback and Rewards	No news is good news Satisfaction in a job well done	Don't appreciate it Money Title recognition	Sorry to interrupt, but how am I doing? Freedom is the best reward	Whenever I want it, at the push of a button Meaningful work
Messages That Motivate	Your experience is respected	You are valued You are needed	Do it your way Forget the rules	You will work with other bright, creative people
Work and Family Life	Ne'er the twain shall meet	No balance Work to live	Balance	Balance

*As this group has not spent much time in the workforce, this characteristic has yet to be determined.

Figure 7: Generational Workplace Characteristics {NOTE: Reprinted from (Hammill, 2005)}

Transformational Leaders must understand that employees have different motivations. Several differences exist within the TACOM-LCMC workforce to include gender, age group, and years of civilian government service. Motivational drivers relate to factors that energize, direct, and sustain an individual's behavior. Several aspects of motivation are similar to values, but motivation relates more to the factors that drive actual performance (Tietjen & Myers, 1998).

According to the gender-centered perspective, individual attributes (i.e.: traits, cognitions, and attitudes) vary according to the leader's gender, meaning that women tend to develop more

feminine leadership styles (i.e.: caring and nurturance) and men, more masculine styles (dominance and task orientation). Additional studies have shown that male leaders exhibiting the Transformational Leadership characteristics of idealized influence and individualized consideration realize more innovation from employees than his counterparts (Reuvers, van Engen, Vinkenburg, & Wilson-Evered, 2008).

Studies conducted in the areas of affiliation, power, progression, ease and security, immersion, and personal growth have shown that both generational similarities and differences in motivation do exist. In the areas of personal growth, ease and security, and immersion, no significant differences existed. Among numerous generational differences noted, the analysis found that Gen Xs, and particularly Gen Ys were more motivated by career progression than Baby Boomers. The study found that many Baby Boomers are coming towards the end of their careers, so career progression no longer served as a key motivator. Other generational differences included that Gen Ys were more motivated in belonging to an organization where they felt more affiliation than baby boomers. The research also found Gen Ys to be less motivated for power than Gen Xs; power motivated baby boomers more than any other age group (Wong, 2008).

An employee's length of service may also aid in determining workplace motivators. As noted earlier, career progression is not key motivator for many baby boomers; baby boomers often possess the most amassed years of service in organizations. However, employees that have amassed extensive lengths of service are often concerned about their eventual transition to retirement. Some companies offer financial planning training to reduce anxiety about retirement. Employees in this category may also be interested in opportunities to mentor junior employees or to reduce their workweeks (Zetlin, 1992). Other motivators for employees in this category include

their salary and job security. Employees often view the motivators, employee salary and their job security, as enablers for a successful transition to retirement (Hitka & Balazova, 2015).

Studies on Transformational Leadership and Motivation

Numerous studies exist related to the use of Transformational Leadership to motivate employees. The results indicate that Transformational Leadership is effective in producing the desired level of employee job motivation; however, several challenges exist. Public service employees must perceive that their assignments are important and that they are empowered to make decisions. Employees with a strong commitment to serve can become frustrated if they perceive that their organization's environment and rules are too constraining. Research indicates that leaders should create an environment that fosters an environment where employees are motivated to benefit the team and organization (Paarlberg & Lavigna, 2010).

Summary of Literature Review

This literature review has revealed that Transformational Leadership if properly implemented will result in increased employee job motivation and productivity. Study results indicate that utilization of Transformational Leadership in conjunction other leadership styles (i.e.: Transactional Leadership) is feasible and beneficial. The incorporation of a Transformational Leadership style positively affects an organization by increasing employee job motivation, productivity, and overall job satisfaction. Additionally, teams realize increased performance, innovation, commitment, and cohesiveness. Transformational Leadership fosters an environment that reduces employee stress and builds trust between the leader and follower (Warrick, 2011).

Chapter 3: Research Methodology

This chapter details the research methodology used to answer the research questions and test the hypotheses. This chapter includes the statement of purpose, the study research questions and hypotheses, as well as, data relating to the surveyed population at the TACOM-LCMC. Additionally, this chapter identifies the research procedures utilized, to include Institutional Review Board (IRB) approval, the survey instrument, and data collection.

Purpose of this Study

The purpose of this study was to determine if higher levels of employee job motivation exist within five TACOM-LCMC subordinate organizations [TACOM Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS] when their leaders embraced and exhibited Transformational Leadership skills. This research also determines if the employee or first-line supervisor's gender, age group, and/or years of civilian government service moderates the effects of Transformational Leadership on employee job motivation. The person's gender was considered because studies have shown that gender biases still exist and that women tend to be more people based in the leadership styles. Age group was considered because this may relate to the stage of their career and career goals; it may also relate to maturity. Consideration was given to the number of years of civilian government service because studies have shown that a person's length of service may indicate the effectiveness of a specific motivation type or their motivation to work under certain leadership environments.

Research Design

This study was designed to collect quantitative data from survey respondents to determine the extent of the leader's ability to lead in a transformational manner and the impact of Transformational Leadership on employee level of job motivation. This study relied on a survey

instrument to measure the level of Transformational Leadership existing in the TACOM-LCMC, the overall level of employee job motivation, and demographic information to determine its effects on employee job motivation. The quantitative data collected derives from survey questions that measured the respondent's perception of the extent that first-line supervisors exhibit the four primary Transformational Leadership dimensions within the TACOM-LCMC and the impact of Transformational Leadership on the employee's overall level of job motivation.

Research Questions:

This research paper addressed five questions related to the effects of Transformational Leadership on TACOM-LCMC workforce's motivation:

- a) Do TACOM-LCMC's first-line supervisors exhibit Transformational Leadership characteristics?
- b) Does Transformational Leadership affect employee job motivation?
- c) Does the employee's gender moderate the impact of Transformational Leadership on employee job motivation?
- d) Does an employee's age moderate the impact of Transformational Leadership on employee job motivation?
- e) Does the length of civilian government service moderate the impact of Transformational Leadership on employee job motivation?

Research Hypotheses

The four hypotheses tested are:

- (H₀₁): Transformational Leadership does not affect employee job motivation.
- (H₀₂): The gender of the employee does not affect the impacts of Transformational Leadership on employee job motivation.

- (H₀₃): The age group of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₄): The employee's years of civilian government service does not affect the impacts of Transformational Leadership on employee job motivation.

Research Procedures

This research required the Institutional Review Board's (IRB) approval at Lawrence Technological University (LTU) because it necessitated human participation. The guidelines mandate that the researcher inform survey participants of their rights and ensure that measures are incorporated to protect the rights and welfare of individuals. These protections ensure that all participation is voluntary and confidentiality maintained. The IRB approval required the completion of the IRB Application for Approval to Conduct Research with Human Participants, the LTU Consent Form, and the LTU Confidentiality Agreement. The IRB application for this survey was submitted on November 05, 2015. The IRB approved the application for this research on November 13, 2015 for a period of one year; see Appendix A reflects the IRB approval letter.

Survey Instrument

The researcher administered the survey through the Survey Monkey's web-based tool. The TACOM-LCMC workforce received an email invitation and a reminder message from the TACOM Staff requesting their participation during a three-week period. The email from TACOM's Staff contained a general hyperlink for the recipients to gain access the survey. All identities of all survey respondents remained anonymous. The demographic questions included gender, age group, years of service, and identified if they were a supervisor. The web-based Survey Monkey tool allowed the researcher to create their own survey and collect responses.

The researcher developed a survey instrument (see Appendix C), consisting of thirty-one questions. The research developed the first twenty-six questions from references that expounded

on Transformational Leadership's four dimensions and employee job motivators (Langston University, 2015; Tietjen & Myers, 1998); the remaining five questions related to demographics. Section one of the survey measured the Transformational Leadership skills of the employee's first-line supervisor. Section one consisted of seventeen questions related to Transformational Leadership's four dimensions. The researcher also utilized the survey's data responses from section two, which allowed the measurement of employee job motivation through the survey participant's responses to nine survey questions related to Transformational Leadership characteristics. Section two consisted of nine questions that considered the effects of Transformational Leadership characteristics on employee job motivation. The following is an example of a question from section two of the survey, "Your supervisor motivates you to prioritize the organization's initiatives over your own personal interests." This section assisted the researcher in understanding the drivers of employee motivation at the TACOM-LCMC. The researcher used the following intrinsic job motivators to measure employee job motivation: job duties, achievement, responsibility, and career opportunities. Motivators result in positive employee attitudes because they lead to the fulfillment of their ultimate goal, self-actualization, in accordance with Maslow's hierarchy of needs (Tietjen & Myers, 1998). The final section considered the employee demographic characteristics of gender, age group, and years of civilian government service to determine if they moderated the effects of Transformational Leadership on employee job motivation. The first and second survey sections asked the survey participant to rate questions related to the Transformational Leadership skills of his or her first-line supervisor and questions related to their job motivation along a 4-point Likert scale; 1-4 (Strongly Agree, Agree, Disagree, and Strongly Disagree). As an example, question # 2 measured the Transformational Leadership

skills of the first-line supervisor by asking the survey participant if they inspired them to proactively mitigate program risks.

The quantitative survey questions were developed from the various characteristics of Transformational Leadership's four primary dimensions; idealized influence (charisma), inspirational motivation, intellectual stimulation, and individual consideration (Bass B. M., 1990). A pilot study was conducted prior to the release of the survey; the Senior Service College Fellowship (SSCF) class of 2016, Defense Acquisition University faculty members, an advisor, and a Lawrence Technological University professor reviewed the correlation between the survey questions and the study to insure that they met the intent. The reviews allowed for feedback on the survey content and ensured the relevance of the survey questions to the conceptual model and research questions. Upon completion of the pilot review, the formal survey questions were developed, and the LTU professor and advisors provided their final comments; their recommendations were incorporated and the research survey finalized. The survey amendments insured the survey questions were focused and addressed considerations related to relevancy.

Participants

Detroit Arsenal's TACOM-LCMC population, from five subordinate organizations, served as the primary survey participants for this study. The five subordinate organizations consisted of the TACOM-LCMC Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS. These five organizations are the primary stakeholders and equate to approximately 4,820 employees. TACOM released the survey to the organization's entire population on December 21, 2015 and it closed on January 15, 2016. The survey responses received equated to 437; 32 responses contained insufficient data for analysis

responses. The completed survey responses equated to 405; 142 responses came from other organizations located on Detroit Arsenal.

Data Analysis

The researcher imported the survey's data into Microsoft Excel via the Survey Monkey tool to allow data cleansing and coding. The researcher converted the Excel spreadsheet's data from text to numeric data to allow for the transference of the data to Minitab version 16.2.2 for descriptive and inferential quantitative statistical analysis. For the inferential statistics, significance was evaluated at the 95% confidence level ($\alpha = .05$). Each statistical procedure used all available data. The researcher utilized Minitab's Table Tally and General Regression functions to analyze the sample responses and demographic data. The Table Tally function provided count and percentage data for each demographic area. The General Regression function analyzed relationships between Transformational Leadership and employee job motivation. The General Regression function also provided hierarchical regression data to test if gender, age group, and/or years of civilian government service moderates the effects of Transformational Leadership on employee job motivation.

Chapter 4: Findings

Introduction

This chapter presents the results of the research on Transformational Leadership's impact on employee job motivation. The objective of this research was to determine if employees who indicate their first-line supervisor has Transformational Leadership skills correspondingly report higher levels of job motivation. This research analyzed the three moderating variables, employee gender, age group, and years of government service to determine if they moderate the impact of Transformational Leadership on employee job motivation. This chapter correlates the collected survey data and the analysis of the survey data responses. This chapter also includes the tested hypotheses and an analysis to either accept or reject.

Population & Sample Size

The survey requested the participation of all of Detroit Arsenal's TACOM-LCMC employees, approximately 7500 employees. The TACOM-LCMC's population, from five subordinate organizations, served as the primary survey stakeholders for this study. The five subordinate organizations, with approximately 4820 employees, consisted of the TACOM-LCMC Staff, Integrated Logistics Support Center (ILSC), Materiel Systems Organization (MSO), PEO CS&CSS, and PEO GCS. The received responses equated to 437 from these 5 organizations or approximately nine percent of the sample size. From the 437 survey responses, 32 responses had an insufficient quantity of questions answered and were deemed unusable for this research. Approximately 93 percent of the submitted survey responses, equating to 405 responses, had a sufficient quantity of questions answered and were deemed usable for this research. As shown in Table 2 and Figure 9, approximately 71% of the survey respondents were males. Approximately 47% of the survey respondents worked within the TACOM-LCMC 10 or less years, and over 88%

of the samples held non-supervisory positions. Of the survey respondents, the prevailing generation was the Baby Boomers (1946-1964) at approximately 48%; the Generation X (1965-1980) generation made up approximately 37%. Combined, these two generations made up over 85% of the survey's respondents. This research utilized descriptive statistics to present the data collected from the submitted surveys. The researcher cleansed the collected data prior to performing the required statistical analysis of the data and removed the 32 incomplete survey responses; the researcher utilized the 405 survey responses deemed usable as the final sample for this research to perform the statistical analyses. This research used Minitab 16 as the software tool to analyze all available data, using general linear modeling inferential statistics to evaluate reliability, validity, and to test the following four study hypotheses:

- (H₀₁): Transformational Leadership does not affect employee job motivation.
- (H₀₂): The gender of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₃): The age group of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₄): The employee's years of civilian government service does not affect the impacts of Transformational Leadership on employee job motivation.

Demographic Characteristics of the Sample

The series of figures below illustrate the demographic characteristics of the survey sample in terms of organization, gender, age group, and years of service. Figure 8 and Table 2 denote sample size data.

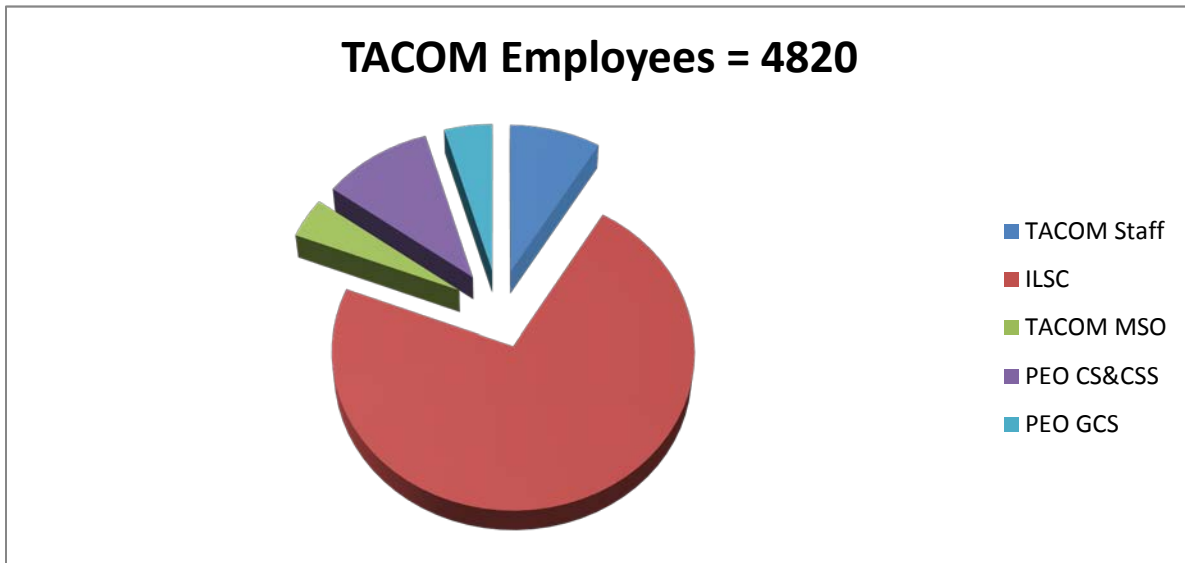


Figure 8: TACOM-LCMC workforce distribution. Adapted from (TACOM-LCMC G1, 2015).

Figure 8 depicts demographics data related to the organizational sample invited to participate in the survey.

Table 2: Adapted from (TACOM-LCMC G1, 2015).

Demographics of TACOM-LCMC employees.

Organization	Total Employees	Female	Male	Supv	Non-Supv	Born Before 1946	1946-1964	1965-1980	After 1980
TACOM Staff	413	194	219	53	360	1	184	161	67
ILSC	3,488	827	2,661	321	3,167	12	1,547	1,356	573
TACOM MSO	200	84	116	30	170	2	81	58	59
PEO CS&CSS	501	183	318	97	404	0	268	192	41
PEO GCS	218	89	129	69	149	2	106	88	22
Totals	4820	1377	3443	570	4250	17	2186	1855	762

Table 2 denotes detailed demographics data related to the organizational sample invited to participate in the survey.

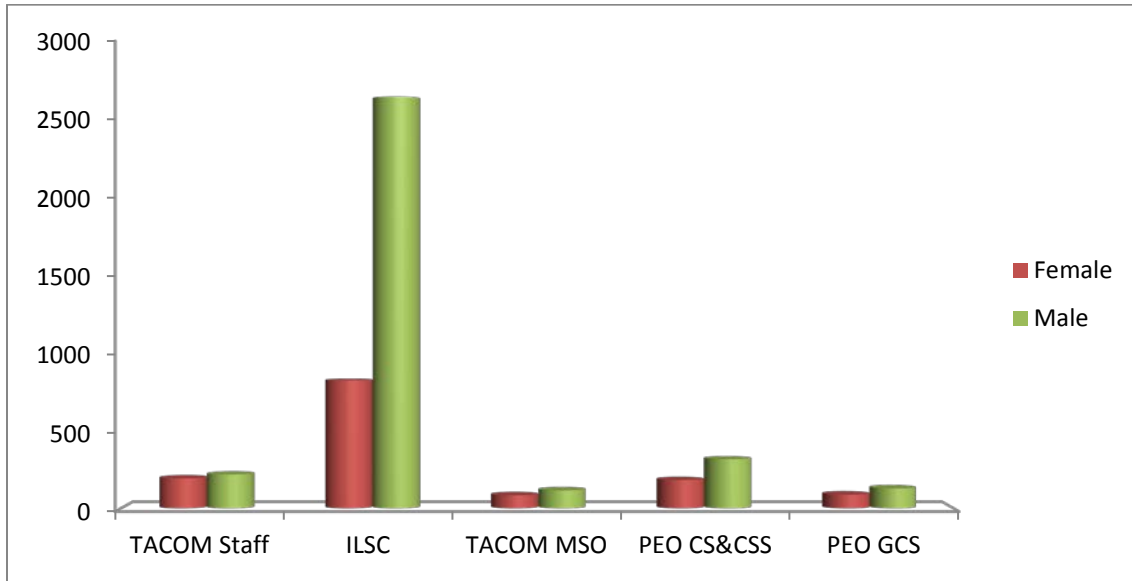


Figure 9: TACOM-LCMC Gender Makeup. Adapted from (TACOM-LCMC G1, 2015).

Figure 9 denotes the gender makeup within each of the noted organizations. Males dominate the workforce in each of the listed organizations; this is particularly evident in the ILSC.

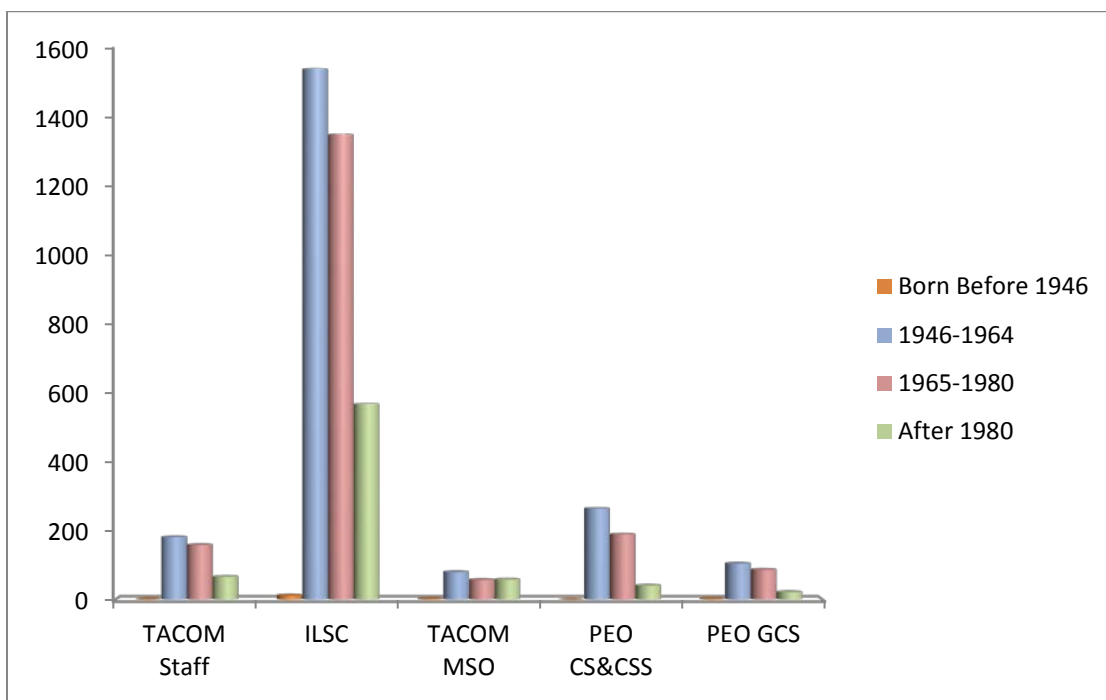


Figure 10: TACOM-LCMC Generational Makeup. Adapted from (TACOM-LCMC G1, 2015).

Figure 10 denotes the generational makeup within each of the noted organizations. The Baby Boomer generation dominates the workforce in each of the listed organizations; this is particularly evident in the ILSC.

Table 3: Adapted from (TACOM-LCMC G1, 2015).

TACOM-LCMC Employees Years of Service Data.

Organization	Average	0 TO 5	6 TO 10	11 TO 20	21 TO 30	31 TO 40	OVER 40	TOTAL
Staff	14.89	66	113	123	59	50	2	413
ILSC	12.89	566	1,148	1,147	363	258	6	3,488
MSO	15.84	28	71	36	30	33	2	200
PEO CS&CSS	16.64	70	127	126	105	71	2	501
PEO GCS	18.13	38	36	48	56	36	4	218

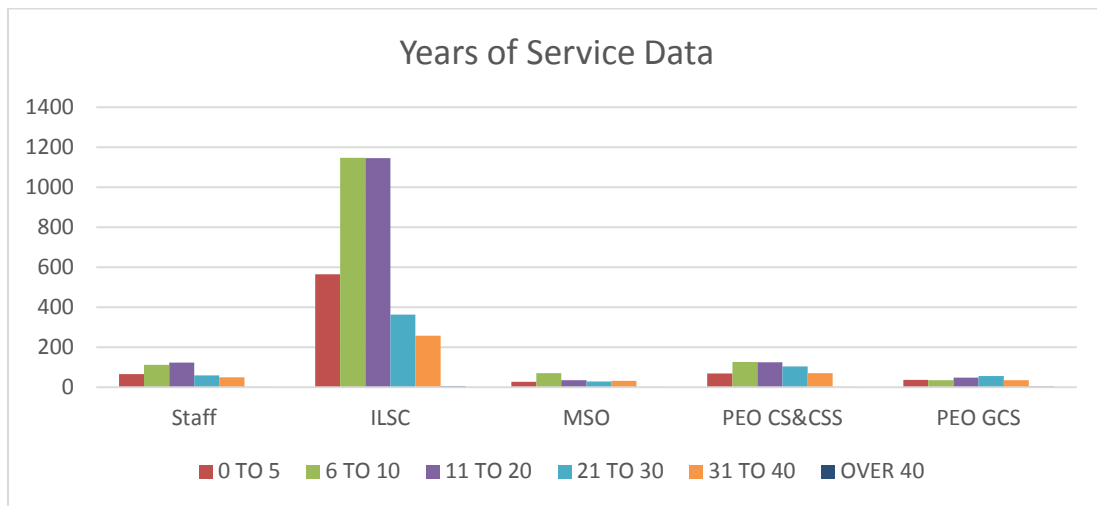


Figure 11: TACOM-LCMC Employee Years of Service. Adapted from (TACOM-LCMC G1, 2015).

Table 3 and Figure 11 denote data related to the years for civilian government service within each of the noted organizations. The greatest workforce disparity exists within the TACOM' Staff and ILSC organizations.

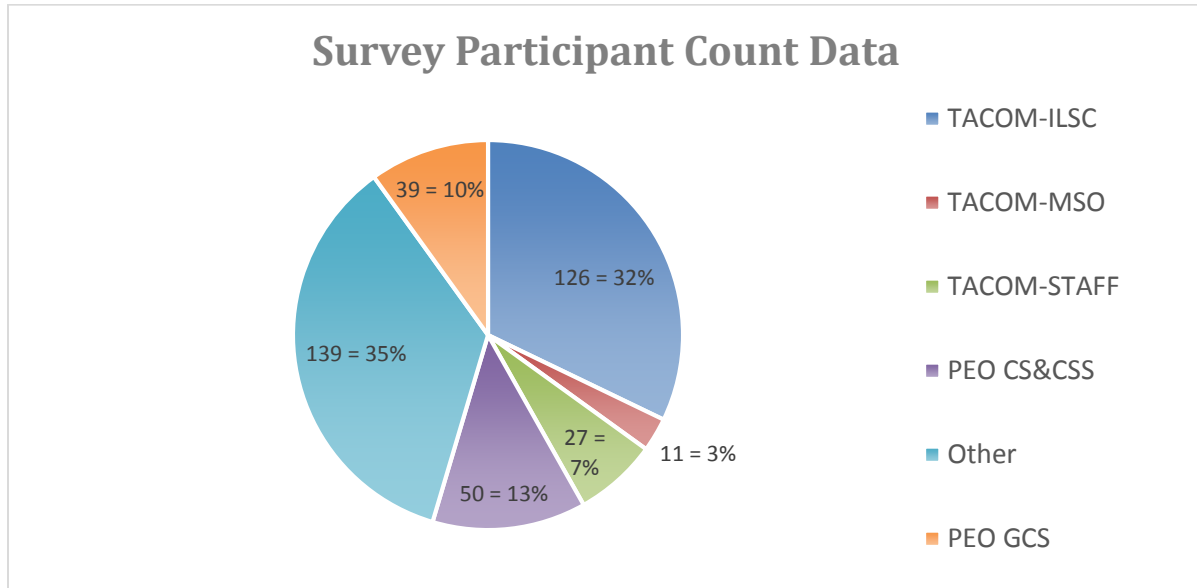


Figure 12: Survey Sample Participant Demographic

Figure 12 depicts data related to the 405 survey respondents. Figure 12 denotes that the sample equates to 405 from five TACOM-LCMC subordinate organizations: TACOM Staff, ILSC, MSO, PEO CS&CSS, and PEO GCS. TACOM's ILSC accounted for 32.14 percent of the sample and the MSO 2.81 percent. TACOM's Staff equated to 6.89 percent, the PEO CS&CSS equated to 12.76 percent, PEO GCS equated to 9.95 percent, and Other organizations equated to 35.46 percent of the sample (NOTE: the sample had no response from 3 percent of the survey participants).

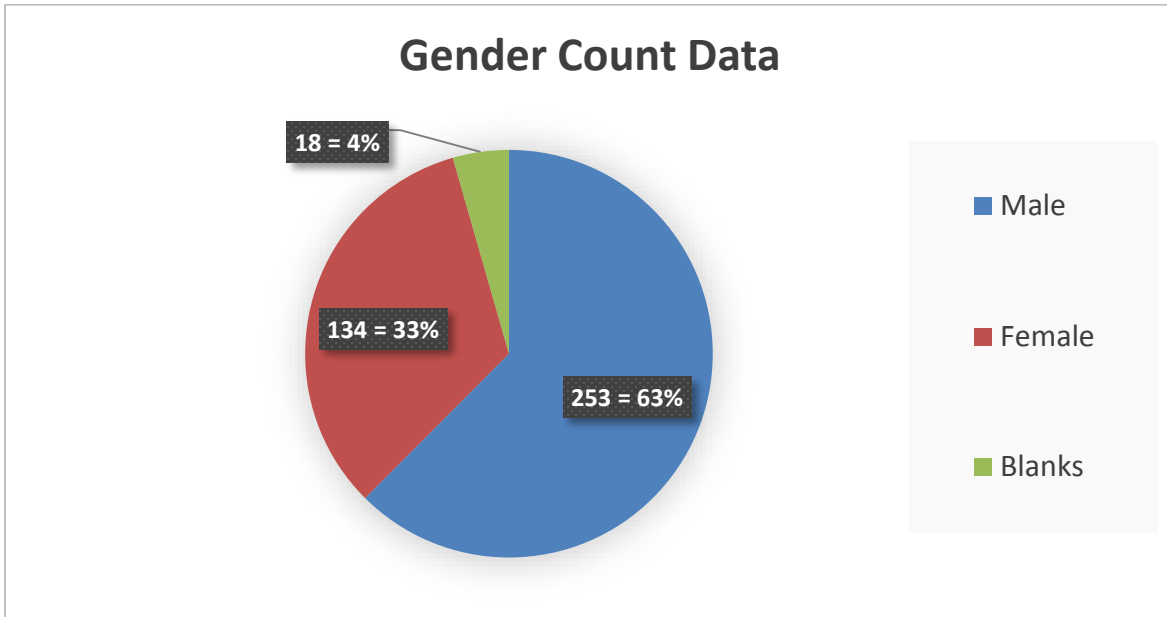


Figure 13: Survey Sample Participant Gender Demographic

Figure 13 denotes detailed gender data of the survey respondents. The sample included more males than females; 62.47% to 33.09% respectively (NOTE: the sample had no response from 4 percent of the survey participants).

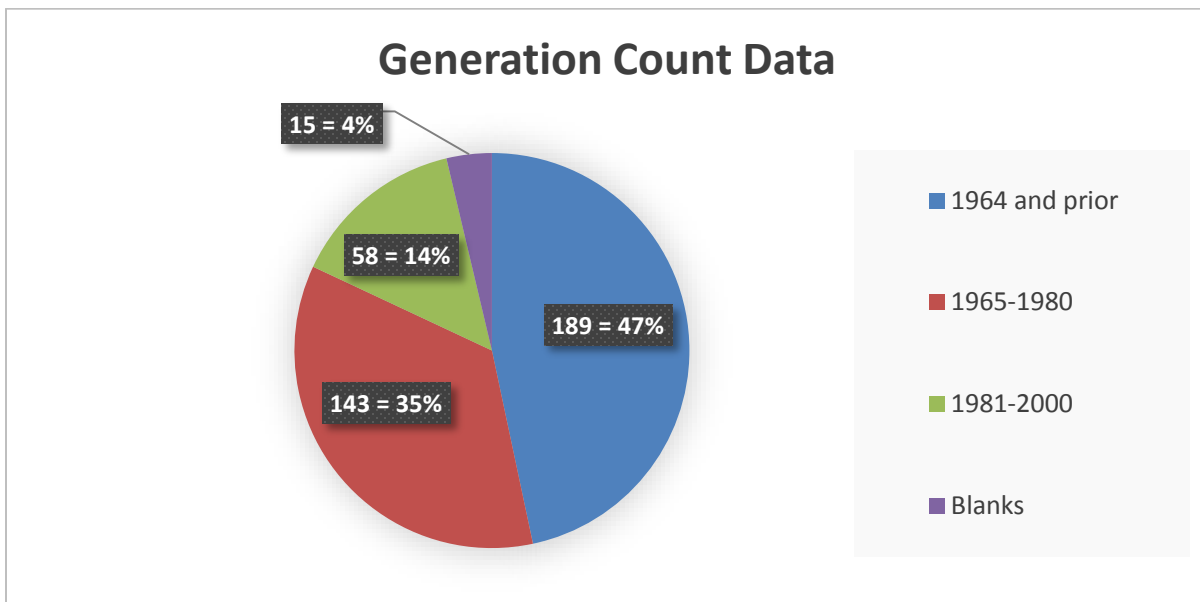


Figure 14: Survey Sample Participant Generation Demographic

Figure 14 depicts the generational makeup of the survey respondents. The sample’s generational makeup consisted primarily of Baby Boomer participants born prior to 1965 at 48.46 percent, followed by Generation X participants born between 1965 and 1980 at 36.67 percent, and Millennial participants born between 1981 and 2000 at 14.87 (NOTE: the sample had no response for 15 survey participants).

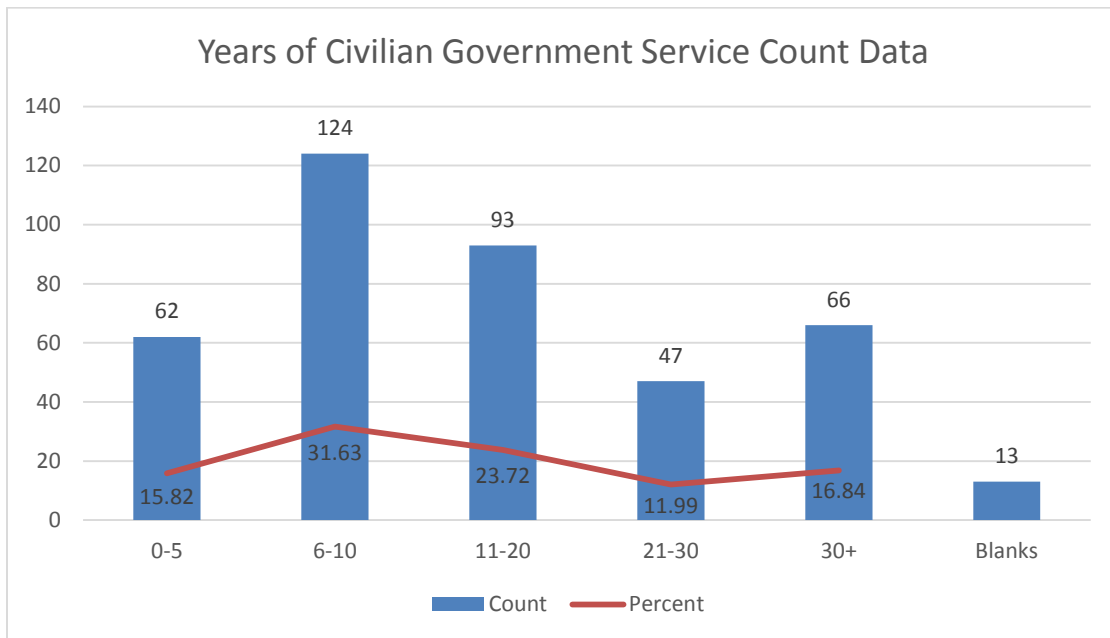


Figure 15: Survey Sample Participant Years of Civilian Government Service Demographic

Figure 15 depicts the sample’s years of service breakdown of the survey respondents. The sample group with 0-5 years of service (YOS) equated to 15.82 percent, while the sample group with 6-10 YOS equated to 31.63 percent. The sample group with 11-20 YOS equated to 23.72 percent, the sample group with 21-30 YOS equated to 11.99 percent, and the sample group with over 30 YOS equated to 16.84 percent (NOTE: the sample had no response for 13 survey participants).

Reliability and Validity

The psychometric properties of the survey questions relating to the existence of Transformational Leadership and its impact on employee job motivation were evaluated statistically using Cronbach's coefficient alpha test of internal consistency (as an index of reliability). A reliability coefficient of 0.7 or higher is indicative of reliability in most social science research situations (UCLA: Statistical Consulting Group, 2016). Tables 4 & 5 present the results of reliability testing.

Table 4: *Reliability of Existence of Transformational Leadership*

Variable	Mean	StDev	Cronbach's Alpha
Your supervisor instills in you a sense of pride in the team (Idealized Influence)	2.02	0.80	0.96
Your supervisor leads by example (Idealized Influence)	1.99	0.81	0.96
Your supervisor inspires you to proactively mitigate program risks (Idealized Influence)	2.04	0.82	0.96
Your supervisor effectively manages stakeholder relationships (Idealized Influence)	2.01	0.73	0.96
Your supervisor willingly serves as a mentor to you (Individualized Consideration)	2.13	0.88	0.96
Your supervisor seeks ways to involve employees in the decision making process (Individualized Consideration)	2.10	0.85	0.96
Your supervisor genuinely cares about your concerns (Individualized Consideration)	1.92	0.81	0.96
Your supervisor is attentive about your career development (Individualized Consideration)	2.08	0.84	0.96
Your supervisor inspires you to strive for excellence in supporting organizational initiatives (Inspiration)	1.97	0.78	0.96
Your supervisor sets high expectations on initiatives (Inspiration)	1.96	0.73	0.96
Your supervisor's leadership style instills a sense of pride towards the organization (Inspiration)	2.13	0.82	0.96
Your supervisor exemplifies a leader with high ethical values (Inspiration)	1.87	0.80	0.96
Your supervisor clearly identifies future goals for your team (Inspiration)	2.22	0.85	0.96
I often feel a sense of achievement at the conclusion of the workweek (Intellectual Stimulation)	2.19	0.83	0.96
Your supervisor's leadership style inspires you to seek creative solutions to organizational challenges (Intellectual Stimulation)	2.22	0.85	0.96
Your supervisor's leadership fosters a teaming environment (Intellectual Stimulation)	2.10	0.86	0.96
Your supervisor empowers you to make decisions related to the performance of your mission (Intellectual Stimulation)	1.88	0.85	0.96

Table 4's data depicts that all Cronbach alpha values are above 0.7, thus reflecting acceptable reliability. The alpha for the 17 questions on the existence of Transformational Leadership each equate to 0.96.

Table 5: Reliability of Transformational Leadership’s Impact on Employee job motivation

Variable	Mean	StDev	Cronbach's
Your supervisor's leadership motivates you to feel responsible to the team (Responsibility)	2.01	0.84	0.8772
Your supervisor motivates you to prioritize the organization's initiatives over your own personal interests (Responsibility)	1.87	0.84	0.8906
Your supervisor motivates you by rewarding you for your achievements (Responsibility)	1.92	0.83	0.8963
You feel motivated when your supervisor informs you of upcoming job openings (Job Duties)	2.02	0.86	0.886
You feel motivated when your supervisor acknowledges employees for exceptional performance (Job Duties)	2.56	0.75	0.8817
Your supervisor motivates you by assigning challenging assignments (Achievement)	2.22	0.86	0.8833
Your supervisor motivates you by empowering you to make decisions in the performance of your duties (Achievement)	2.31	0.86	0.8895
Your supervisor's leadership motivates you to feel responsible to the team (Career Opportunity)	1.95	0.86	0.8791
Your supervisor motivates you to support organizational initiatives (Career Opportunity)	2.16	0.84	0.8958

Table 5’s data depicts that all Cronbach alpha values are above 0.7, thus reflecting acceptable reliability. The alpha for the nine questions on the impacts of Transformational Leadership on employee job motivation each equate to above 0.85. The results of the psychometric properties testing indicates the study survey’s data as reliable; consequently, further statistical analyses of the four study hypotheses ensued.

Statistical Analysis

The researcher performed a statistical analysis to test the research hypotheses and answer the research questions. This research paper sought to test the following four hypotheses related to the effects of Transformational Leadership on TACOM-LCMC workforce’s motivation using statistical analyses:

- (H₀₁): Transformational Leadership does not affect employee job motivation.

- (H₀₂): The gender of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₃): The age group of the employee does not affect the impacts of Transformational Leadership on employee job motivation.
- (H₀₄): The employee's years of civilian government service does not affect the impacts of Transformational Leadership on employee job motivation.

To answer the research questions and to test the hypotheses, the researcher utilized the data responses from section one of the survey, which measured the Transformational Leadership skills of the employee's first-line supervisor. The researcher also utilized the survey's data responses from section two, which allowed the measurement of employee job motivation through the survey participant's responses to nine survey questions related to Transformational Leadership characteristics. The following is an example of a question from section two of the survey, "Your supervisor motivates you to prioritize the organization's initiatives over your own personal interests." The researcher also utilized the data from sections one and two of the survey to determine if Transformational Leadership statistically and significantly impacted employee job motivation and if its application affected employee job motivation when moderated by gender, age group, and/or years of civilian government service.

The researcher performed regression analyses to conduct the statistical analyses. Table 6 reflects the statistical analysis for regression equation: $MOT = 0.4767 + 0.8540 TL$, which relates employee Motivation (MOT) to Transformational Leadership (TL).

Table 6: Regression Analysis of Motivation vs. Transformational Leadership (TL)

General Regression Analysis: Motivation (MOT) vs.	Y-Intercept		Unit of Increase	Transformational Leadership (TL)		
MOT =	0.4767	+	0.8540	TL		
Term	Coef	SE Coef	Z	P	95% CI	R²
Constant	0.48	0.05	9.96	<0.001	0.382663,0.570804	
TL	0.85	0.02	38.25	<0.001	0.810081,0.897857	78.80%

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. All available data = 395. * $p < 0.05$, ** $p < 0.01$ R² Change

As the p value for the predictor equates to <0.001, a significant slope and a relationship exists; **the null hypothesis stated in H₀₁ is rejected**. The regression analysis calculates that for each point Transformational Leadership increases, employee job motivation increases by approximately 0.85 points. The R square value indicates that Transformational Leadership accounts for approximately 79% of the variance in employee job motivation.

Table 7 depicts the relationship between Transformational leadership and Gender. Specifically, it reflects the statistical analysis for regression equation: MOT = 0.4761 + 0.8503 Transformational Leadership + 0.0045 Gender.

Table 7: Hierarchical Regression Analysis of Motivation Regressed on Transformational Leadership (TL)—Moderation by Gender

General Regression Analysis: MOT vs.	Y-Intercept		Unit of Increase	TL		Unit of Increase	TL, Gender		Unit of Increase / Decrease	TL * Gender
MOT =	0.4767	+	0.8540	TL						
MOT =	0.4761	+	0.8503	TL	+	0.0045	Gender			
MOT =	0.4762	+	0.8503	TL	+	0.0044	Gender	+	0.0000	TL*Gender

Step	Term	Beta (95% CI)	SE	Z	p	R ²	R ² Change
1	Constant	0.48 (0.38,0.57)	0.05	9.96	<0.001		
1	TL	0.85(0.81,0.90)	0.02	38.25	<0.001	78.83%	
2	TL	0.85 (0.81,0.89)	0.02	38.10	<0.001		
2	Gender	0.02 (-0.05,0.06)	0.03	0.15	0.884	79.12%	0.29%*
3	TL	0.85 (0.72,0.98)	0.07	12.64	<0.001		
3	Gender	0.00 (-0.19,0.20)	0.10	0.04	0.965		
3	TL*Gender	0.00 (-0.09,0.09)	0.05	0.00	1.000	79.12%	0.00%*

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. Moderation was tested by including a moderator x TL interaction term in the regression. All available data = 387. *p < 0.05, **p < 0.01 R² Change

As the p value for the predictor equals 1.000, **the null hypothesis for H₀₂ is accepted**. The confidence level does contain zero, indicating that a significant slope and a relationship does not exist. No moderation effect exists for Transformational Leadership * Gender and the relationship is not statistically significant. The regression analysis calculates that for each point Transformational Leadership and Gender increases, employee job motivation increases by

approximately 0.02 points. The R square value shows that Transformational Leadership accounts for approximately 79% of the variance in employee job motivation.

Table 8 reflects the statistical analysis for regression equation: MOT = 0.4513 + 0.8537 Transformational Leadership + 0.0167 Generation.

Table 8: (TL) - Hierarchical Regression Analysis of Motivation Regressed on Transformational Leadership (TL) - Moderation by Generation

General Regression Analysis: MOT vs.	Y-Intercept		Unit of Increase	TL		Unit of Increase	TL, Generation		Unit of Increase / Decrease	TL * Generation
MOT =	0.4767	+	0.8540	TL						
MOT =	0.4513	+	0.8537	TL	+	0.0167	Generation			
MOT =	0.5212	+	0.8196	TL	-	0.0275	Generation	+	0.0218	TL*Generation

Step	Term	Beta (95% CI)	SE	Z	p	R ²	R ² Change
1	Constant	0.48 (0.38,0.57)	0.05	9.96	<0.001		
1	TL	0.85(0.81,0.90)	0.02	38.25	<0.001	78.83%	
2	TL	0.85 (0.81,0.90)	0.02	37.78	<0.001		
2	Generation	0.02 (-0.02,0.06)	0.02	0.82	0.414	78.73%	-0.1%*
3	TL	0.82 (0.71,0.93)	0.06	14.66	<0.001		
3	Generation	-0.03 (-0.16,0.11)	0.07	-0.40	0.692		
3	TL*Generation	0.02 (-0.04,0.09)	0.03	0.67	0.505	78.76%	0.03%*

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. Moderation was tested by including a moderator x TL interaction term in the regression. All available data = 390. *p < 0.05, **p < 0.01 R² Change

As the p value for the predictor equals 0.505, **the null hypothesis for H₀₃ is accepted**. The confidence level does contain zero, indicating that a significant slope and a relationship does not

exists. No moderation effect exists for Transformational Leadership * Generation and the relationship is not statistically significant. The regression analysis calculates that for each point Transformational Leadership and Generation increases, employee job motivation increases by approximately 0.02 points. The R square value shows that Transformational Leadership accounts for approximately 79% of the variance in employee job motivation.

Table 9 depicts the relationship between Transformational leadership and Years of Civilian Government Service (YOS). Specifically it reflects the statistical analysis for regression equation:
 $MOT = 0.615 + 0.8510 \text{ Transformational Leadership} + 0.0076 \text{ YOS}$.

Table 9: Hierarchical Regression Analysis of Motivation Regressed on Transformational Leadership (TL) - Moderation by Years of Civilian Government Service (YOS)

General Regression Analysis: MOT vs.	Y-Intercept		Unit of Increase	TL		Unit of Increase	TL, YOS		Unit of Increase / Decrease	TL * YOS
MOT =	0.4767	+	0.8540	TL						
MOT =	0.4615	+	0.8510	TL	+	0.0076	YOS			
MOT =	0.3885	+	0.8883	TL	+	0.0317	YOS	-	0.0122	TL * YOS

Step	Term	Beta (95% CI)	SE	Z	p	R ²	R ² Change
1	Constant	0.48 (0.38,0.57)	0.05	9.96	<0.001		
1	TL	0.85(0.81,0.90)	0.02	38.25	<0.001	78.83%	
2	TL	0.85 (0.81,0.90)	0.02	37.78	<0.001		
2	YOS	0.01 (-0.01,0.03)	0.01	0.83	0.406	78.75%	-0.08%*
3	TL	0.89 (0.79,0.99)	0.05	17.96	<0.001		

3	YOS	0.03 (-0.03,0.09)	0.03	1.06	0.290		
3	TL*YOS	-0.01 (-0.04,0.02)	0.01	-0.85	0.398	78.79%	0.04%*

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. Moderation was tested by including a moderator x TL interaction term in the regression. All available data = 392. * $p < 0.05$, ** $p < 0.01$ R² Change

As the p value for the predictor equals 0.398, **the null hypothesis for H₀₄ is accepted**. The confidence level does contain zero, indicating that a significant slope and a relationship does not exist. No moderation effect exists for Transformational Leadership * YOS and the relationship is not statistically significant. The regression analysis calculates that for each point Transformational Leadership and YOS increases, employee job motivation increases by approximately 0.01 points. The R square value shows that Transformational Leadership accounts for approximately 79% of the variance in employee job motivation.

This research paper also sought to answer the following five research questions related to the effects of Transformational Leadership on TACOM-LCMC workforce’s motivation using statistical analyses:

- a) Do TACOM-LCMC’s first-line supervisors exhibit Transformational Leadership characteristics?
- b) Does Transformational Leadership affect employee job motivation?
- c) Does the employee’s gender moderate the impact of Transformational Leadership on employee job motivation?
- d) Does an employee’s age moderate the impact of Transformational Leadership on employee job motivation?
- e) Does the length of civilian government service moderate the impact of Transformational Leadership on employee job motivation?

The researcher performed regression analyses to conduct the statistical analyses. Table 10 reflects the statistical analysis for regression equation: $MOT = 0.2930 + 0.4350 MR1 + 0.2118 MR2 + 0.1826 MR3$.

Table 10: *Regression Analysis of Motivation vs. Transformational Leadership (TL) “Responsibility” Motivation Factors*

General Regression Analysis: Motivation (MOT) vs.	Y-Intercept		Unit of Increase	Motivation – Responsibilities (MR)	Unit of Increase	Motivation – Responsibilities (MR)	Unit of Increase	Motivation – Responsibilities (MR)
MOT =	0.29	+	0.44	MR1	0.21	MR2	0.18	MR3
Term	Coef	SE Coef	Z	P	95% CI	R²		
Constant	0.29	0.05	6.17	<0.001	0.20,0.39			
Responsible to the team	0.44	0.02	24.42	<0.001	0.40,0.47			
Work overtime to support the mission	0.21	0.02	11.45	<0.001	0.18,0.25			
Prioritize organizational initiatives over your own	0.18	0.02	10.21	<0.001	0.15,0.22	84.64%		

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. All available data = 386. * $p < 0.05$, ** $p < 0.01$ R² Change

Table 11: *Regression Analysis of Motivation vs. Transformational Leadership (TL) “Job Duties” Motivation Factors*

General Regression Analysis: Motivation (MOT) vs.	Y-Intercept		Unit of Increase	Motivation – Job Duties (MJ)	Unit of Increase	Motivation – Job Duties (MJ)
MOT =	0.62	+	0.31	MJ1	0.46	MJ2
Term	Coef	SE Coef	Z	P	95% CI	R²
Constant	0.29	0.05	15.02	<0.001	0.60,0.78	
Empowers you to make decisions	0.31	0.02	13.90	<0.001	0.27,0.36	
Support organizational initiatives	0.46	0.03	17.77	<0.001	0.41,0.51	76.28%

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. All available data = 395. * $p < 0.05$, ** $p < 0.01$ R² Change

Table 12: Regression Analysis of Motivation vs. Transformational Leadership (TL) “Achievement” Motivation Factors

General Regression Analysis: Motivation (MOT) vs.	Y-Intercept		Unit of Increase	Motivation – Achievement (MA)	Unit of Increase	Motivation – Achievement (MA)
MOT =	0.64	+	0.41	MA1	0.31	MA2
Term	Coef	SE Coef	Z	P	95% CI	R ²
Constant	0.64	0.50	12.78	<0.001	0.54,0.73	
Rewards for achievements	0.41	0.02	18.85	<0.001	0.37,0.45	
Acknowledges employee exceptional performance	0.31	0.02	14.17	<0.001	0.27,0.35	74.59%

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. All available data = 391. * $p < 0.05$, ** $p < 0.01$ R² Change

Table 13: Regression Analysis of Motivation vs. Transformational Leadership (TL) “Career Opportunity” Motivation Factors

General Regression Analysis: Motivation (MOT) vs.	Y-Intercept		Unit of Increase	Motivation – Career Opportunity (MC)	Unit of Increase	Motivation – Career Opportunity (MC) (MR)
MOT =	0.54	+	0.48	MC1	0.29	MC2
Term	Coef	SE Coef	Z	P	95% CI	R ²
Constant	0.54	0.47	11.50	<0.001	0.45,0.63	
Assigns challenging assignments	0.48	0.02	26.68	<0.001	0.44,0.52	
Informs you of upcoming job openings	0.29	0.02	15.63	<0.001	0.25,0.32	79.76%

Note. Beta (95% confidence interval) of the linear regression is presented as the unstandardized regression coefficient. SE = standard error of Beta. All available data = 387. * $p < 0.05$, ** $p < 0.01$ R² Change

In accordance with the data in Tables 10 through 13, the p value for the predictors in each equates to <0.001 , a significant slope and a relationship exists. The R square value shows that Transformational Leadership explains approximately 85% of the variance in employee job motivation. The regression analysis calculates the following for each point that the Transformational Leadership (TL) “Responsibility” Motivation factor increases in Table 10:

- Employee job motivation increases by approximately 0.44 points for “motivates to feel responsible to the team”,
- Approximately 0.21 points for “motivates to work overtime to support the mission”,
- Approximately 0.18 points for “motivates to prioritize the organization's initiatives over own personal interests”.

For each point the Transformational Leadership (TL) “Job Duties” Motivation factor increases in Table 11, the following is true:

- Employee job motivation increases by approximately 0.31 points for “motivates by empowering to make decisions in the performance of duties”
- Approximately 0.46 points for “motivates to support organizational initiatives.”

For each point the Transformational Leadership (TL) “Achievement” Motivation Factor increases in Table 12, the following is true:

- Employee job motivation increases by approximately 0.41 points for “motivates by rewarding for your achievements”
- Approximately 0.31 points for “motivates by acknowledging employees for exceptional performance.”

For each point the Transformational Leadership (TL) “Career Opportunity” Motivation Factor increases in Table 13, the following is true:

- Employee job motivation increases by approximately 0.48 points for “motivates by assigning challenging assignments”
- Approximately 0.29 points for “motivates by informing of upcoming job openings.”

An analysis of the survey sample data in Table 6 allowed the researcher to answer the first research question, “Do TACOM-LCMC’s first-line supervisors exhibit Transformational Leadership characteristics?” The data affirms that TACOM-LCMC’s first-line supervisors do exhibit Transformational Leadership characteristics. The table’s data proves that a significant slope and a relationship exists as the p value for the predictor <0.001 . Additionally, the mean score for the Transformational Leadership construct, 2.05, illustrates that the organization’s leadership does exhibit Transformational Leadership characteristics.

An analysis of the survey sample data in Tables 10-13 allowed the researcher to answer the second research question, “Does Transformational Leadership affect employee job motivation?” The data affirms that Transformational Leadership does affect employee job motivation. The data in Table 6 data proves that a significant slope and a relationship exists since the p value for the predictor <0.001 . Additionally, the mean score for the second survey section (2.11) illustrates that the organization’s leadership is effective in motivating their employees. However, the mean scores proved the ineffectiveness of Transformational Leadership for questions 18e (“motivates you to work overtime to support the mission”) and 18g (“motivates you to prioritize the organization's initiatives over your own personal interests”).

An analysis of the survey sample data in Table 7 allowed the researcher to answer the third research question, “Does the employee’s gender moderate the impact of Transformational Leadership on employee job motivation?” The p value for the predictor equaled approximately

1.000 and the null hypothesis for H_{02} was accepted; an employee's gender does not moderate the impact of Transformational Leadership on employee job motivation.

An analysis of the survey sample data in Table 8 allowed the researcher to answer the fourth research question, "Does an employee's age moderate the impact of Transformational Leadership on employee job motivation?" The p value for the predictor equaled approximately 0.505, the null hypothesis for H_{03} was accepted; an employee's generation does not moderate the impact of Transformational Leadership on employee job motivation.

An analysis of the survey sample data in Table 9 allowed the researcher to answer the fifth research question, "Does the length of civilian government service moderate the impact of Transformational Leadership on employee job motivation?" The p value for the predictor equaled approximately 0.398, the null hypothesis for H_{04} was accepted; an employee's years of civilian government service does not moderate the impact of Transformational Leadership on employee job motivation.

Summary

This chapter introduced the findings of the research. The survey section, population and sample size, identified the population that the survey solicited and the number of responses received. The responses identified data on the respondents' gender, age group, and the years of civilian government service. The survey section, Demographic Characteristics of the Sample, provided count data related to the primary survey participants and data related to the participants' gender, age group, and years of civilian government service. The survey section, Reliability and Validity, statistically evaluated reliability using a Cronbach's coefficient alpha test of internal consistency. The survey section, Statistical Analysis, provided a statistical analysis that tested the research hypotheses and answered the research questions. The analysis indicated that

Transformational Leadership does increase employee job motivation. The analysis also indicated that the moderating variables of the employee's gender, age group, and years of civilian government service did not affect the impact of Transformational Leadership on employee job motivation. Appendices D and E provides data that reaffirms these findings. Chapter 5 presents the conclusions and recommendations drawn from the analysis results.

Chapter 5 – Conclusions and Recommendations

Introduction

The TACOM-LCMC's work environment is financially austere. TACOM-LCMC's subordinate organizations often have reduced or limited resources to accomplish their critical missions. Several challenges are affecting the workforce and hampering productivity within the organizations. First, an expectation exists that first-line supervisors will continue to accomplish their assigned missions with dwindling resources, particularly personnel and funding. Second, several distractors exist that affect employee job motivation, to include a potential government shutdown, workforce downsizing, and increasing workloads. While TACOM's first-line supervisors cannot affect the status of the federal budget, their leadership style may result in increased employee job motivation, productivity, and reduced employee turnover.

As surmised in this research paper, "motivation drives what employees do, how they do it, how hard they will try, and how long they will persist in a given endeavor" (U.S. Merit Systems Protection Board, 2012, p. 3). A motivated TACOM-LCMC workforce is essential to improving the effectiveness and efficiency of its support to the military warfighter. Research results encourage Transformational Leadership because it positively affects an organization's performance at all levels; numerous examples exist where corporate leaders enhanced performance by instilling a sense of mission and by influencing employees to support organizational requirements before their own (Bass B. M., 1990). This study, along with other research, has affirmed that Transformational Leadership does affect employee job motivation.

Findings and Implications

This section surmises the findings determined for each of the research questions and hypotheses. This study's analysis indicated that Transformational Leadership does increase

employee job motivation. The analysis also indicated that the moderating variables employee gender, age group, and/or years of civilian government service did not affect the impacts of Transformational Leadership on employee job motivation. In accordance with Chapter 4's statistical analysis, the following depicts the results to each of this study's five research questions and four hypotheses:

- a) Do TACOM-LCMC's first-line supervisors exhibit Transformational Leadership characteristics?

The data in Table 6 affirms that a significant slope and a relationship exists. Additionally, the mean score for the Transformational Leadership construct, 2.05, affirmed that the organization's leadership does exhibit Transformational Leadership characteristics.

- b) Does Transformational Leadership affect employee job motivation?

The data in Table 6 affirms the null hypothesis for H_{01} is rejected; thus denoting that Transformational Leadership does affect employee job motivation; the data results proved that a significant slope and a relationship exists.

- c) Does the employee's gender moderate the impact of Transformational Leadership on employee job motivation?

The data in Table 7 affirms the null hypothesis for H_{02} is accepted; thus denoting that an employee's gender does not moderate the impact of Transformational Leadership on employee job motivation; a significant slope and a relationship does not exist.

- d) Does an employee's age moderate the impact of Transformational Leadership on employee job motivation?

The data in Table 8 affirms the null hypothesis for H₀₃ is accepted; thus denoting that an employee's age group does not moderate the impact of Transformational Leadership on employee job motivation; a significant slope and a relationship does not exist.

e) Does the length of civilian government service moderate the impact of Transformational Leadership on employee job motivation?

The data in Table 9 affirms the null hypothesis for H₀₄ is accepted; thus denoting that an employee's years of civilian government service does not moderate the impact of Transformational Leadership on employee job motivation; a significant slope and a relationship does not exist.

Recommendations

The results of this research paper suggest that TACOM-LCMC senior leadership earnestly consider increased utilization of Transformational Leadership at all supervisory levels. The researcher developed two recommendations for TACOM-LCMC's senior leadership from the research findings. First, mandate the incorporation of Transformational Leadership concepts into the training and development of TACOM-LCMC first-line supervisors. Second, consider establishing Transformational Leadership training sessions for the organization's aspiring leaders. The increased utilization of Transformational Leadership characteristics will contribute to increasing employee job motivation at the TACOM-LCMC and further benefit the organization by increasing employee productivity, while reducing employee turnover.

The researcher further recommends utilizing the organization's existing process for monitoring training metrics to ensure these training objectives are achieved. Additionally, leader trainers should emphasize Transformational Leadership skills' importance to the organization during supervisory training sessions. These recommendations are consistent with the TACOM-

LCMC's vision to, "Be the Army's preeminent ground and support system provider postured to deliver overwhelming battlefield dominance through 2020 and beyond."

References

- Avolio, B. J., & Bass, B. M. (2002). *Developing potential across a full range of leadership: Cases on transactional and transformational leadership*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Bass, B. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology* 8(1), 9-32.
- Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share the Vision. *Organizational Dynamics*, 19-31.
- Donahue, D. B. (2013, January 31). *The Pseudo- Transformational Leader*. Retrieved from Developing and Changing Leaders: <http://drbilldonahue.com/transformational-leader/>
- Fuller, J. B. (1999). The effects of psychological empowerment on transformational leadership and job satisfaction. *The Journal of Social Psychology* 139(3), 389-391.
- Hammill, G. (2005, Winter/Spring). *FDU Magazine Online*. Retrieved from Mixing and managing four generations of employees: <http://www.fdu.edu/newspubs/magazine/05ws/generations.htm>
- Hawkins, P. (2011). *Leadership team coaching: Developing collective transformational leadership*. London: London: Kogan Page.
- Hitka, M., & Balazova, Z. (2015). The Impact of Age, Education and Seniority on Motivation of Employees. *Business: Theory and Practice*, 113-120.
- Langston University. (2015). *Transformational Leadership*. Retrieved from <http://www.langston.edu/sites/default/files/basic-content-files/TransformationalLeadership.pdf>

MORGAN, R. V. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 607-610.

Paarlberg, L. E., & Lavigna, B. (2010). Transformational Leadership and Public Service Motivation: Driving Individual and Organizational Performance. *Public Administration Review*, 710-718.

Reuvers, M., van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational Leadership and Innovative Work Behaviour: Exploring the Relevance of Gender Differences. *Creativity and Innovation Management*, *Leadership and Innovation*, 227-244.

Schermerhorn, J. R. (2005). *Organizational Behavior (9th ed.)*. Hoboken, NJ: John Wiley & Sons.

Stajkovic, A. D. (2010). *Add-on Effect of Transformational Leadership*. Retrieved from http://images.slideplayer.us/1/4937/slides/slide_7.jpg

TACOM-LCMC G1. (2015). *TACOM Demographic Data*. Warren, MI: TACOM-LCMC.

Tichy, N. M., & Devanna, M. A. (1986). The Transformational Leader. *Training and Development Journal*, 26-32.

Tietjen, M. A., & Myers, R. M. (1998). Motivation and Job Satisfaction: Management Decision. pp. 226-231.

U.S. Merit Systems Protection Board. (2012, November). *Federal Employee Engagement: The Motivating Potential of Job Characteristics and Rewards*. Retrieved from

<http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=780015&version=782964>

UCLA: Statistical Consulting Group. (2016). *SPSS FAQ- What does Cronbach's alpha mean?* .

Retrieved from <http://www.ats.ucla.edu/stat/spss/faq/alpha.html>

Vserve Management Systems. (2013). Retrieved from MANAGEMENT STUDY GUIDE:

<http://managementstudyguide.com/transformational-leadership.htm>

Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. (2005). Transformational leadership, organizational commitment, and job satisfaction: a comparative study of Kenyan and U.S. financial firms. *Human Resource Development Quarterly* 16(2), 235-256.

Warrick, D. D. (2011). The Urgent Need for Skilled Transformational Leaders: Integrating Transformational Leadership and Organization Development. *Journal of Leadership, Accountability & Ethics*, 11-26.

Wong, M. G. (2008). Generational Differences in Personality and Motivation. *Managerial Psychology*, 878-890.

Yang, F., Wu, M., Chang, C., & Chien, Y. (2011). Transformational Leadership, Job Satisfaction, Commitment Foci and Commitment Bases in the Public Sector. *Public Personnel Management* 40(3), 265-278.

Zetlin, M. (1992). Older & Wiser: Tips to Motivate the 50s Crowd. *Management Review*, 30-33.

Glossary of Acronyms and Terms

AT&L.....	Acquisition, Technology, and Logistics
DAG	Defense Acquisition Guidebook
DAU	Defense Acquisition University
DCMA.....	Defense Contract Management Agency
DoD.....	Department of Defense
DoDD	Department of Defense Directive
H ₀	Null Hypothesis
ILSC	Integrated Logistics Support Center
IPPD	Integrated Product and Process Development
IPT	Integrated Product Team
LCMC	Life Cycle Management Command
MSO	Materiel Systems Organization
PEO CS&CSS-----	Program Executive Office Combat Support & Combat Service Support
PEO GCS	Program Executive Office Ground Combat Systems
TRADOC	Training and Doctrine Command
USD (AT&L).	Under Secretary of Defense for Acquisition, Technology, and Logistics

Appendix A – IRB Approval Letter



Institutional Review Board
Office of the Provost
research.ltu.edu irb@ltu.edu

November 13, 2015

Craig Cogger
Lawrence Technological University
College of Management
Senior Service College Fellowship Program
ccogger@ltu.edu

Dear Mr. Cogger,

I am pleased to report that the IRB application to conduct research with human participants for your SSCF Master's thesis "Transformational Leadership and Workforce Motivation" has been approved under the Expedited review path for a period of one year, November 13, 2015 – November 13, 2016.

The IRB is satisfied that the following ethical concerns regarding the treatment of your human participants have been addressed in your research protocol: (1) The research involves administering a web-based survey to an individual who is at least 18 years of age or older in order to determine the relationship between leadership style and worker motivation; (2) Participants who will voluntarily consent to complete the survey are free to withdraw from the study at any time; (3) You have identified potential risks to you and the participants; and (4) You have assured that a balance exists between potential benefits of the research to the participants and/or society and the risk assumed by the participants.

Please contact the IRB if you require an extension to your project after one year. Please note you must contact the IRB if you make a change to your research protocol that impacts the ethical treatment of your research participants. Please do not hesitate to contact the IRB if you have any questions.

Sincerely,

Matthew Cole, Ph.D.
Chair, Institutional Review Board (IRB)
Lawrence Technological University
irb@ltu.edu o: 248.204.3096 f: 248.204.3099

The Lawrence Tech IRB is organized and operated according to guidelines of the United States Office for Human Research Protections and the United States Code of Federal Regulations and operates under Federal Wide Assurance No. FWA00010997 that expires 02/10/2017.

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Appendix B – Author Biography



SENIOR SERVICE COLLEGE FELLOWSHIP DEFENSE ACQUISITION UNIVERSITY – MIDWEST REGION

CRAIG C. COGER

Craig C. Coger grew up in New York City, NY. His military career, from 1983-2003, consisted of an enlistment in the U.S. Navy, followed by sixteen years in the U.S. Army, where he retired as a Chief Warrant Officer. Craig's military duty assignments include a tour of duty at Naval Air Station in Norfolk, VA; followed by Army assignments at Ft. Stewart, GA, Army Recruiting in Paterson, N.J., Fort Polk, LA, HQ Combat Equipment Group-Europe, the Netherlands, Ft. Carson, CO, and Ft. Hood, TX. Subsequent to active duty, he worked for General Dynamics-Land Systems on the Abrams program. Craig joined the Civilian Service in 2004. His civilian assignments include Commodity Group Leader for TACOM's Chemical/Biological Defense Product Support Integration Directorate and System Acquisition Manager for Product Manager Sets, Kits, Outfits, and Tools (PdM SKOT).

CAREER CHRONOLGY:

- 2015-Present: Defense Acquisition University Senior Service College Fellowship, Warren, MI
- 2009-2015: Group Leader for Chemical/Biological Defense PSID; TACOM-LCMC, Warren, MI
- 2008-2009: Logistics Management Specialist/Supervisor for Chemical/Biological Defense PSID; TACOM-LCMC, Warren, MI
- 2004-2008: Logistics Management Specialist/Systems Acquisition Manager for PM JCS, PEO CS&CSS, Warren, MI
- 2003-2004: Parts Technical Inspector for General Dynamics, Land Systems; Fort Hood, TX
- 1987-2003: Active Duty U.S. Army, Duty- Worldwide in Army Maintenance Units
- 1983-1987: Active Duty U.S. Navy, Duty- Norfolk, VA in Aviation Intermediate Maintenance

EDUCATION:

- BS, Management Studies, University of Maryland University College, 2002
- Master's in Business Administration (MBA), Saint Ambrose University, 2009

CERTIFICATIONS:

- Army Acquisition Corps Member
- Level III Certification in Life Cycle Logistics
- Level II Certification in Program Management

AWARDS AND HONORS:

- Several Military Awards/Decorations to include: Army Bronze Star, Army Meritorious Service, Army Commendation, Army Achievement, Army Civilian Achievement Medals

Appendix C – Survey Instrument

Transformational Leadership and Workforce Motivation

Survey Disclaimer and Consent

Hello,

My name is Craig Coger and I am currently enrolled as a graduate student within Lawrence Technological

University's College of Management and as a Fellow in the Defense Acquisition University's (DAU's) Senior

Service College Fellowship Program. The purpose of this research is to gain a better understanding of Transformational Leadership and its impact on employee job motivation.

I am inviting you to participate in this study because you are at least 18 years of age and are members of the TACOM Life Cycle Management Command working in various career fields.

As an adult 18 years of age or older, you agree to participate in this survey about organizational change management. You understand that your participation is entirely voluntary. You can withdraw your consent at any time. By agreeing to participate in this study, you indicate that you understand the following:

- If you choose to participate, you will be asked to complete an online survey which will take approximately 10-15 minutes to complete.
- There will be no incentive for participation.
- All items in the survey are important for analysis, and the data will be more meaningful if all questions are answered. You can discontinue participation at any time without penalty by exiting out of the survey.
- This survey should not expose you to any discomfort or stress beyond that which might normally occur during a typical day. There are no right or wrong answers; thus, you need not be stressed about finding a correct answer.
- There are no known risks associated with your participation in this study.
- Data collected will be handled in a confidential manner and will remain anonymous.

This research is carried out under the oversight of the Institutional Review Board (IRB) of Lawrence Technological University http://www.ltu.edu/provosts_office/irb.asp. If you want to contact the IRB directly, please contact Lawrence Technological University, Institutional Review Board, 21000 West Ten Mile Road, irb@ltu.edu, (248) 204-3096. The survey is being conducted by Craig Coger as part of an independent study (craig.coger@dau.mil).

I have read this informed consent and I AGREE to participate.

I have read this informed consent and I DO NOT AGREE to participate.

Transformational Leadership and Workforce Motivation

Leadership and Employee Motivation Considerations

Please answer the following questions regarding yourself and your supervisor. Supervisor is defined as your immediate supervisor/rater... Answer each question by selecting whether you "Strongly Disagree", "Disagree", "Agree", or "Strongly Agree"

Q1: Your supervisor instills in you a sense of pride in the team.

Strongly Disagree Disagree Agree Strongly Agree

Q2: Your supervisor leads by example.

Strongly Disagree Disagree Agree Strongly Agree

Q3: Your supervisor inspires you to proactively mitigate program risks.

Strongly Disagree Disagree Agree Strongly Agree

Transformational Leadership and Workforce Motivation

Leadership and Employee Motivation Considerations (cont.)

Please answer the following questions regarding yourself and your supervisor. Supervisor is defined as your immediate supervisor/rater... Answer each question by selecting whether you "Strongly Disagree", "Disagree", "Agree", or "Strongly Agree"

Q4: Your supervisor effectively manages stakeholder relationships.

Strongly Disagree Disagree Agree Strongly Agree

Q5: Your supervisor willingly serves as a mentor to you.

Strongly Disagree Disagree Agree Strongly Agree

Q6: Your supervisor seeks ways to involve employees in the decision making process.

Strongly Disagree Disagree Agree Strongly Agree

Q7: Your supervisor genuinely cares about your concerns.

Strongly Disagree Disagree Agree Strongly Agree

Q8: Your supervisor is attentive about your career development.

Strongly Disagree Disagree Agree Strongly Agree

Q9: Your supervisor inspires you to strive for excellence in supporting organizational initiatives.

Strongly Disagree Disagree Agree Strongly Agree

Transformational Leadership and Workforce Motivation

Leadership and Employee Motivation Considerations (cont.)

Please answer the following questions regarding yourself and your supervisor. Supervisor is defined as your immediate supervisor/rater... Answer each question by selecting whether you "Strongly Disagree", "Disagree", "Agree", or "Strongly Agree"

Q10: Your supervisor sets high expectations on initiatives.

Strongly Disagree Disagree Agree Strongly Agree

Q11: Your supervisor's leadership style instills a sense of pride towards the organization.

Strongly Disagree Disagree Agree Strongly Agree

Q12: Your supervisor exemplifies a leader with high ethical values.

Strongly Disagree Disagree Agree Strongly Agree

Q13: Your supervisor clearly identifies future goals for your team.

Strongly Disagree Disagree Agree Strongly Agree

Q14: I often feel a sense of achievement at the conclusion of the workweek

Strongly Disagree Disagree Agree Strongly Agree

Transformational Leadership and Workforce Motivation

Leadership and Employee Motivation Considerations (cont.)

Please answer the following questions regarding yourself and your supervisor. Supervisor is defined as your immediate supervisor/rater... Answer each question by selecting whether you "Strongly Disagree", "Disagree", "Agree", or "Strongly Agree"

Q15: Your supervisor's leadership style inspires you to seek creative solutions to organizational challenges.

Strongly Disagree Disagree Agree Strongly Agree

Q16: Your supervisor's leadership fosters a teaming environment.

Strongly Disagree Disagree Agree Strongly Agree

Q17: Your supervisor empowers you to make decisions related to the performance of your mission.

Strongly Disagree Disagree Agree Strongly Agree

Leadership and Workforce Motivation

This set of questions addresses considerations that affect workforce motivation.

Q18: Please assess the degree to which you agree with the following statements relative to Workforce Motivation.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Your supervisor's leadership motivates you to feel responsible to the team.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor motivates you by empowering you to make decisions in the performance of your duties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor motivates you to support organizational initiatives.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor motivates you by assigning challenging assignments.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor's leadership motivates you to work overtime to support the mission.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor motivates you by rewarding you for your achievements	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your supervisor motivates you to prioritize the organization's initiatives over your own personal interests.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel motivated when your supervisor acknowledges employees for exceptional performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel motivated when your supervisor informs you of upcoming job openings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Transformational Leadership and Workforce Motivation

Demographics

Q19: Which best describes your position?

- Supervisor
- Non Supervisor
- Team Leader
- Functional support

Q20: What is your parent organization?

- TACOM G-Staff
- TACOM - ILSC
- TACOM - MSO
- Other (please specify)

Q21: In which of the following does your birth year fall?

- 1964 or before
- 1965-1980
- 1981-2000

Q22: Which of the following identifies your years of civilian government service ?

- 0-5
- 6-10
- 11-20
- 21-30
- 30+

Q23: What is your gender?

- Male
- Female

Transformational Leadership and Workforce Motivation

END OF SURVEY

Thank You for your participation in this survey. Please provide any other comments you feel may benefit this survey to craig.coger@dau.mil or ccoger@itu.edu.

Appendix D – Survey Section One Response Data

Appendix D depicts Figures 16 through 32 with data relating to question responses from section one of the survey and the resulting mean scores. The Likert scale comprised of four options: strongly agree (1), agree (2), disagree (3), and strongly disagree (4). The overall mean score from section one of the survey (Questions 1-17), which aimed to measure the Transformational Leadership skills of the employee’s first-line supervisor, equated to 2.047 on the Likert scale. Section one of the survey’s data results affirm that overall, the respondent’s first-line supervisors do exhibit Transformational Leadership skills. The question, “exemplifies a leader with high ethical values (Characteristic: Inspirational),” had the highest mean score in the first survey section; the mean score equated to 1.869. The question, “clearly identifies future goals for your team (Characteristic: Inspirational),” had the lowest mean score in the first survey section; the mean score equated to 2.221. The mean scores of the remaining questions the first survey section ranged between 1.876 and 2.200.

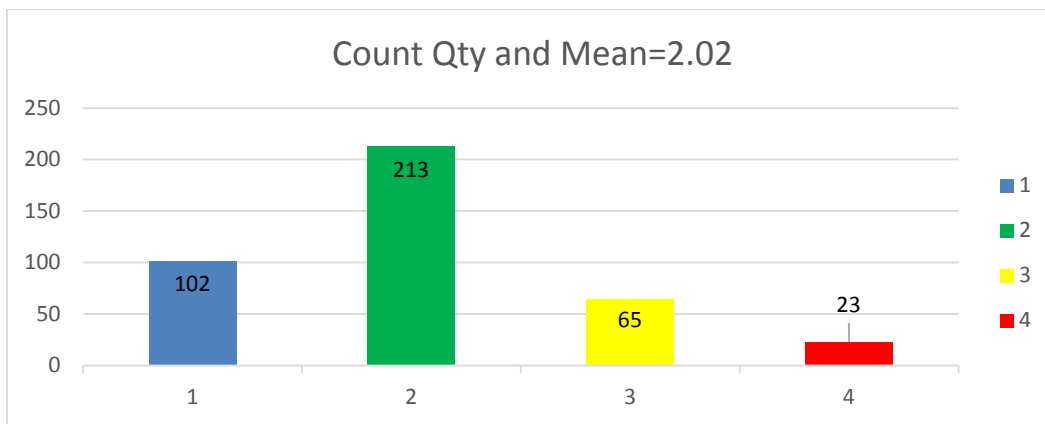


Figure 16: Q1: *Instills in you a sense of pride in the team (Idealized Influence)*

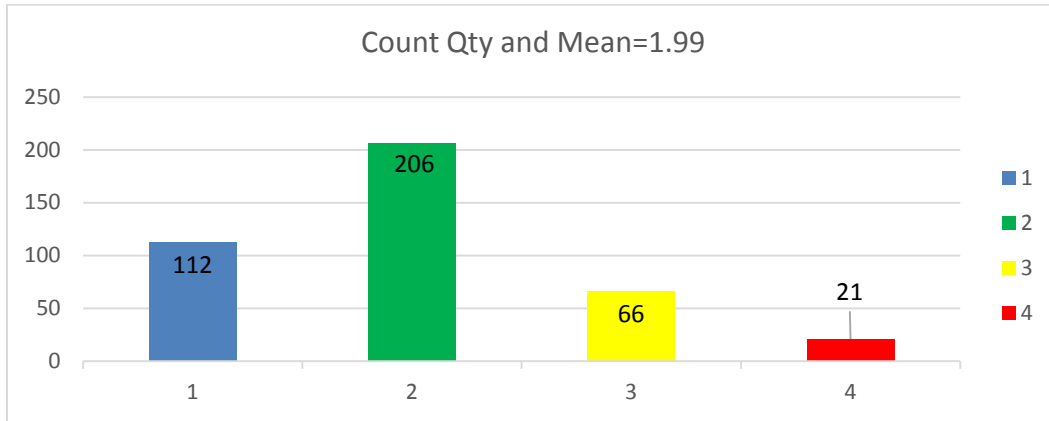


Figure 17: Q2: Leads by example (Idealized Influence)

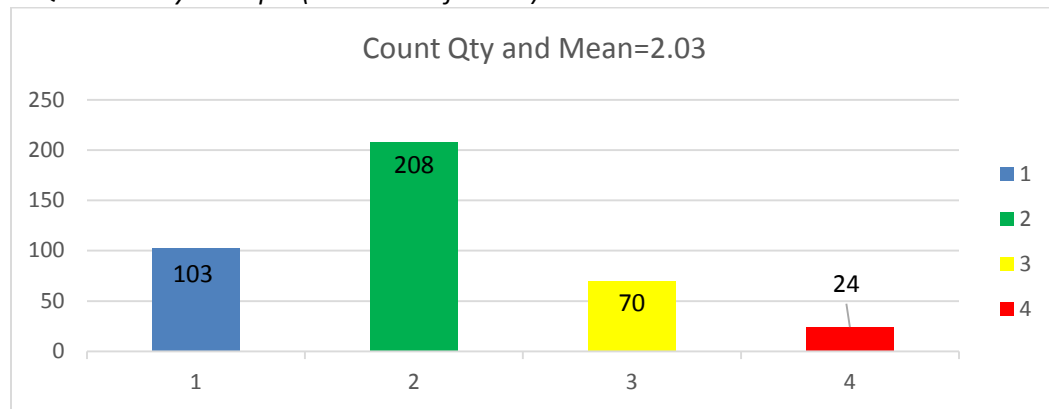


Figure 18: Q3: Inspires proactive program risk mitigation. (Idealized Influence)

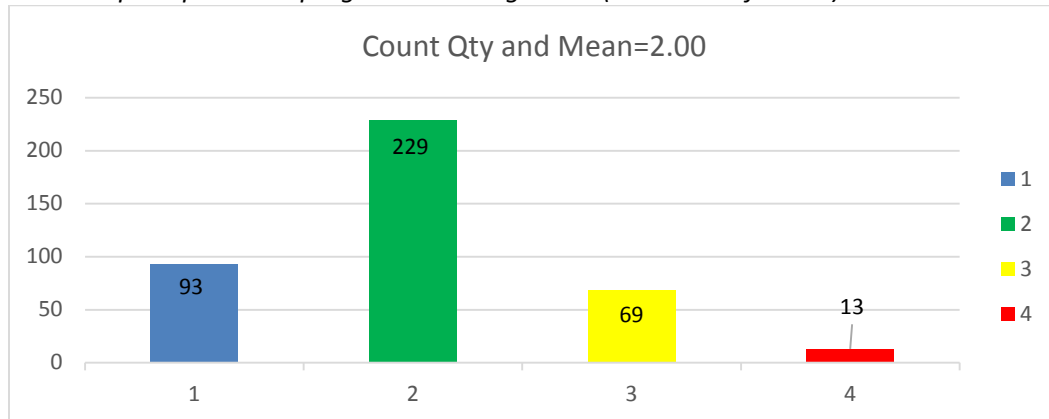


Figure 19: Q4: Effectively manages stakeholder relationships. (Idealized Influence)

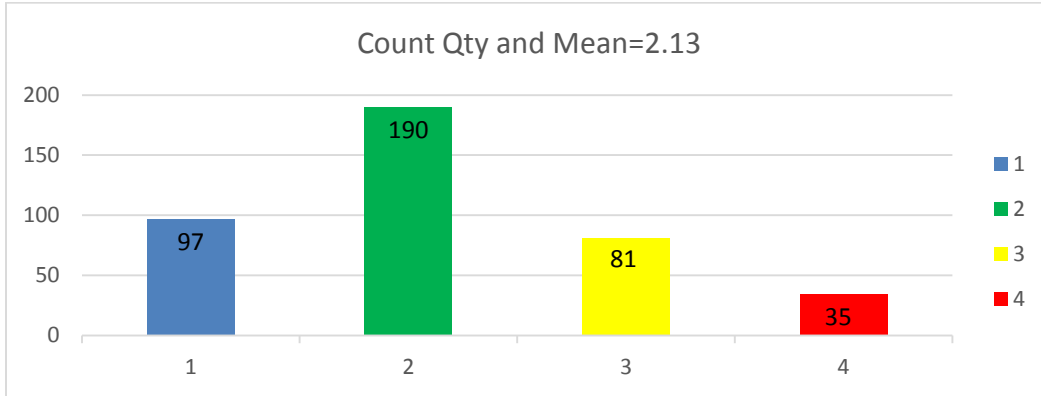


Figure 20: Q5: Willingly serves as a mentor to you (Individualized Consideration)

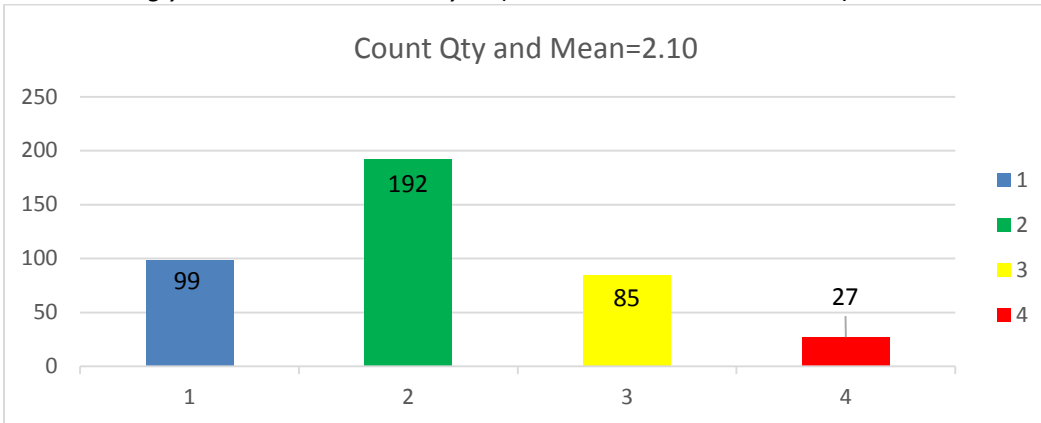


Figure 21: Q6: Involves employees in the decision making process. (Individualized Consideration)

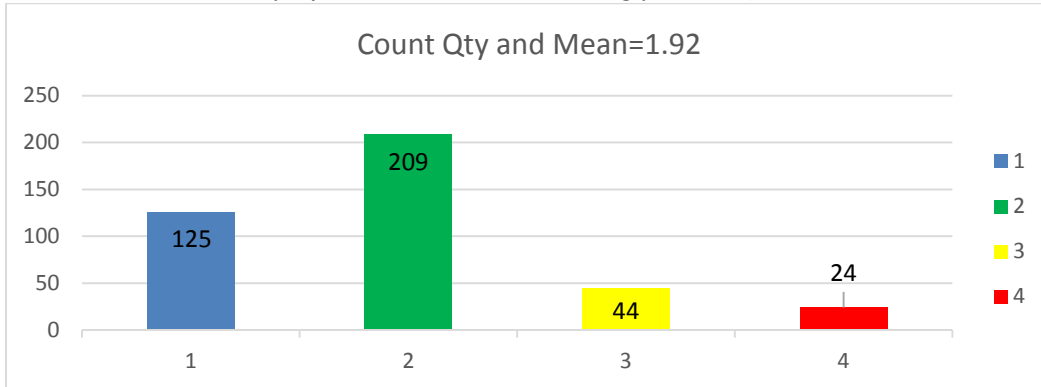


Figure 22: Q7: Genuinely cares about your concerns (Individualized Consideration)

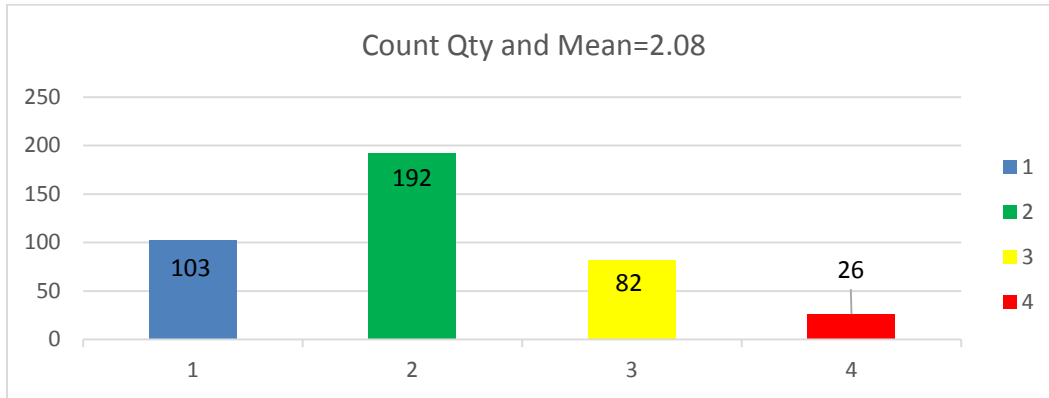


Figure 23: Q8: *Is attentive about your career development (Individualized Consideration)*

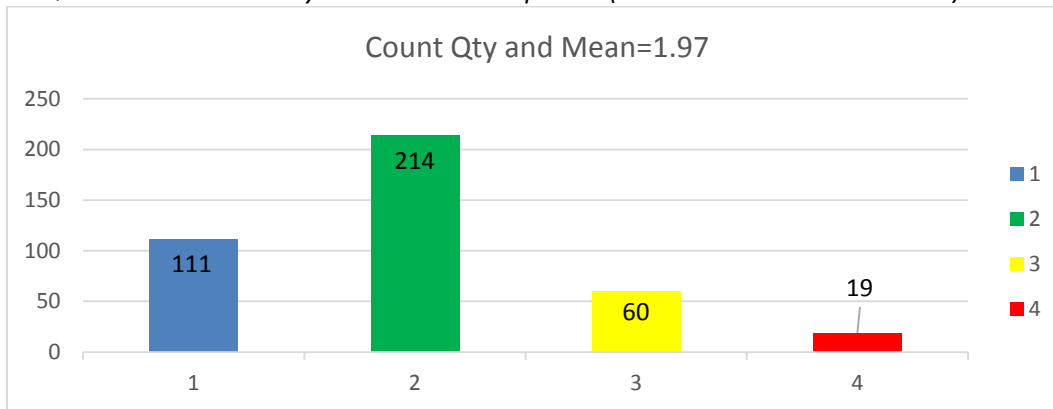


Figure 24: Q9: *Inspires excellence to support organizational initiatives (Inspirational)*

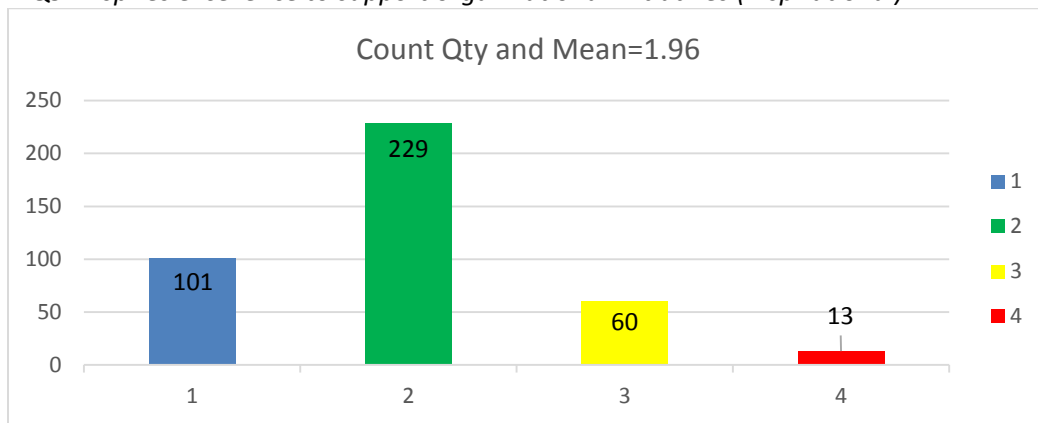


Figure 25: Q10: *Sets high expectations on initiatives (Inspirational)*

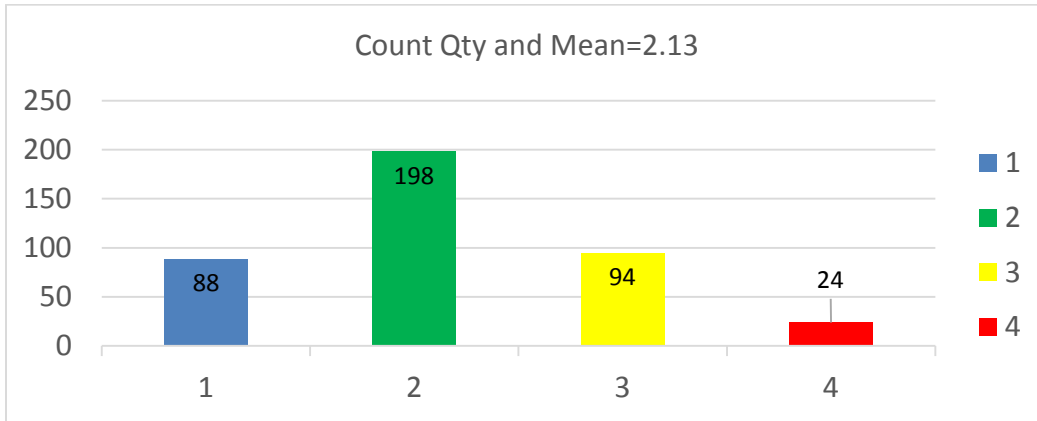


Figure 26: Q11: Instills a sense of pride towards the organization (Inspirational)

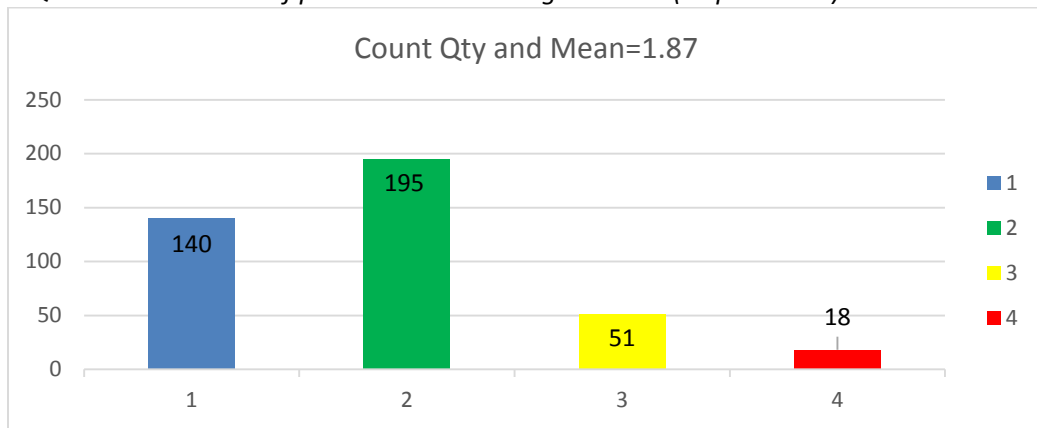


Figure 27: Q12: Exemplifies a leader with high ethical values (Inspirational)

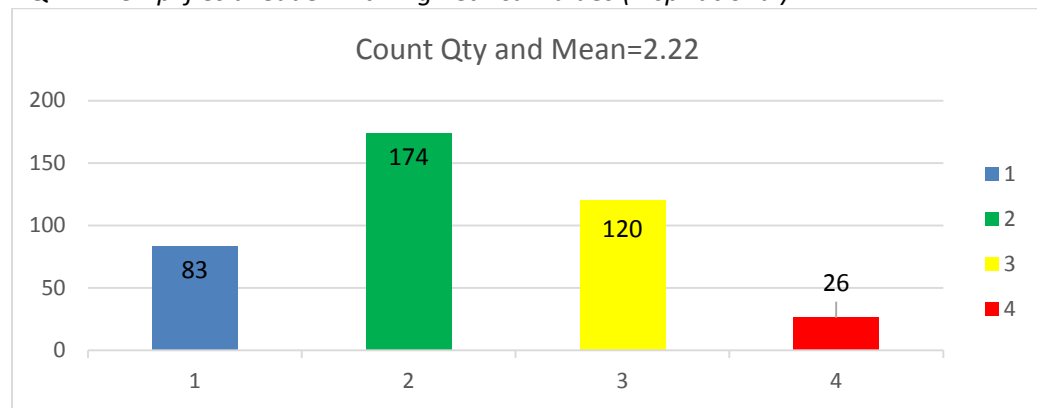


Figure 28: Q13: Clearly identifies future goals for your team (Inspirational)

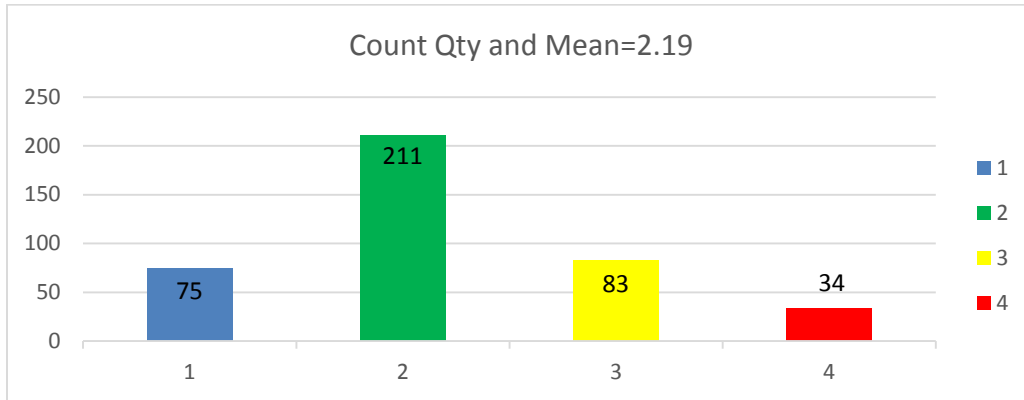


Figure 29: Q14: *Sense of achievement at the conclusion of the workweek (Intellectual Stimulation)*

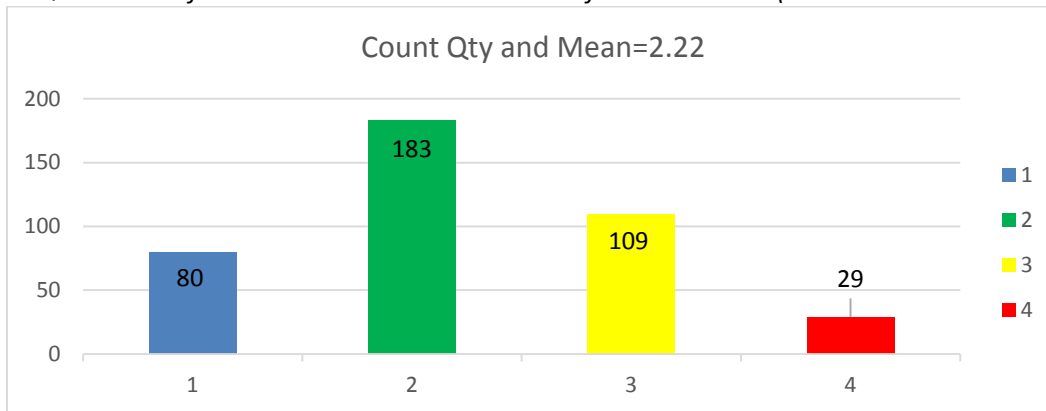


Figure 30: Q15: *Inspires creative organizational challenges solutions (Intellectual Stimulation)*

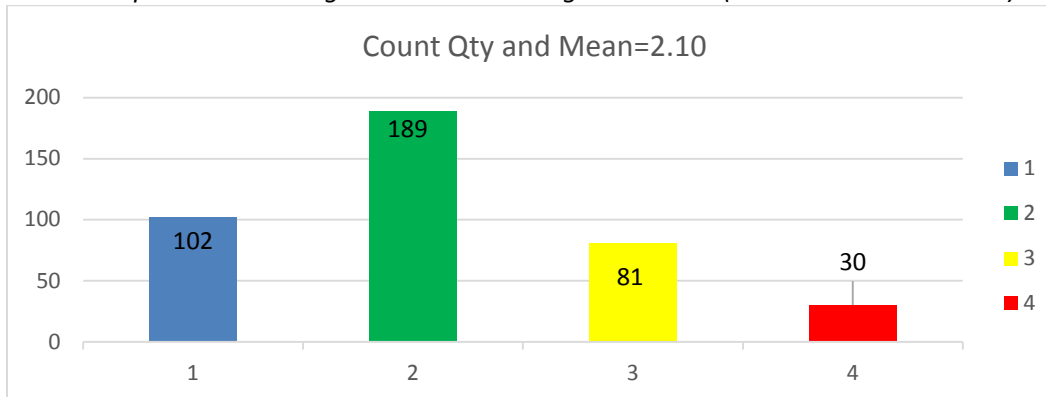


Figure 31: Q16: *Leadership fosters a teaming environment (Intellectual Stimulation)*

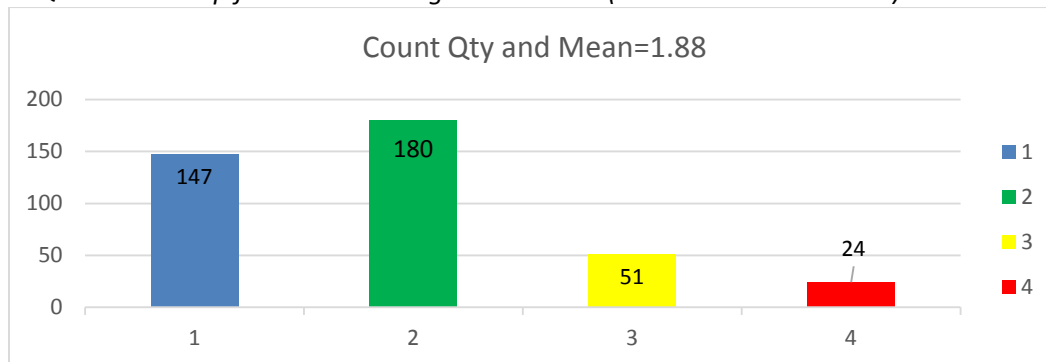


Figure 32 Q17: *Empowers decisions related to mission performance (Intellectual Stimulation)*

Appendix E – Survey Section Two Response Data

Appendix E depicts Figures 33-41 with data relating to question responses from section two of the survey and the resulting mean scores. The Likert scale comprised of four options: strongly agree (1), agree (2), disagree (3), and strongly disagree (4). The overall mean score for the second survey section, which aimed to gauge the impacts of Transformational Leadership characteristics on employee job motivation (Questions 18a-i), equated to 2.11 on the Likert scale. Section two of the survey’s data results reaffirm that overall, the Transformational Leadership skills of the respondent’s first-line supervisors do impact employee job motivation. Question 18b, “motivates by empowering you to make decisions in the performance of your duties (Motivation: Job Duties),” obtained the highest mean score in the second survey section, with a mean score of 1.87. Question 18e, “motivates you to work overtime to support the mission (Motivation: Responsibility),” obtained the lowest mean score in the second survey section, with a mean score of 2.56. The mean scores of the remaining survey’s questions ranged between 1.92 and 2.31.

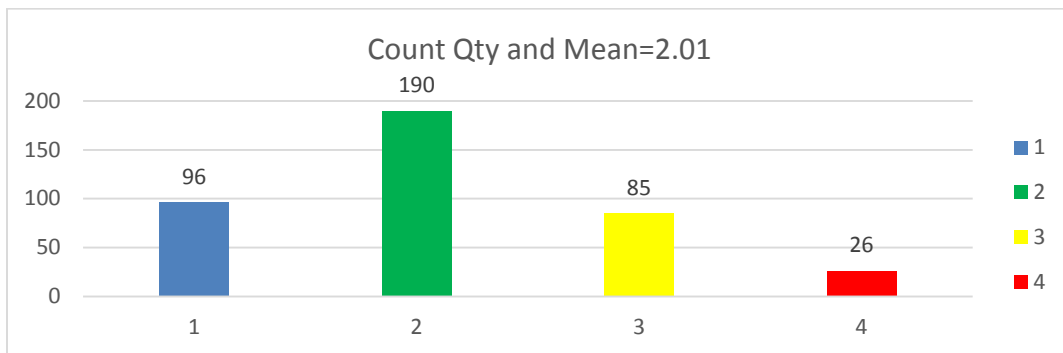


Figure 33: Q18a: *Motivates you to feel responsible to the team (Motivation: Responsibility)*

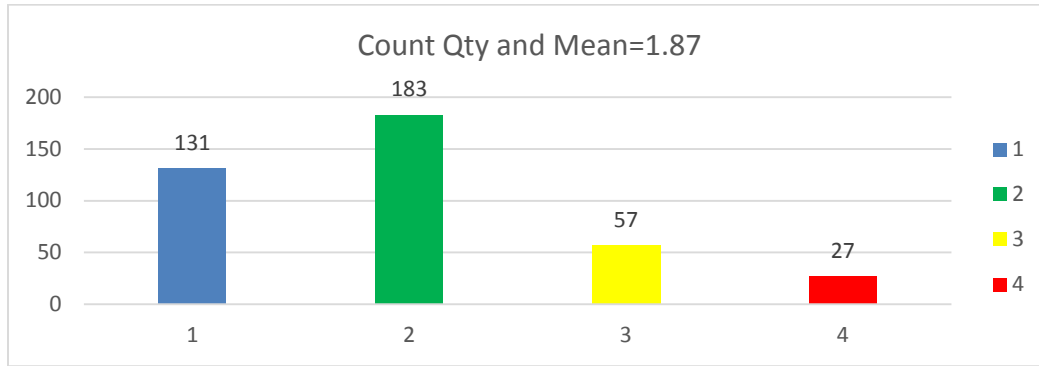


Figure 34: Q18b: *Motivates by empowering you to make decisions in the performance of your duties (Motivation: Job Duties)*

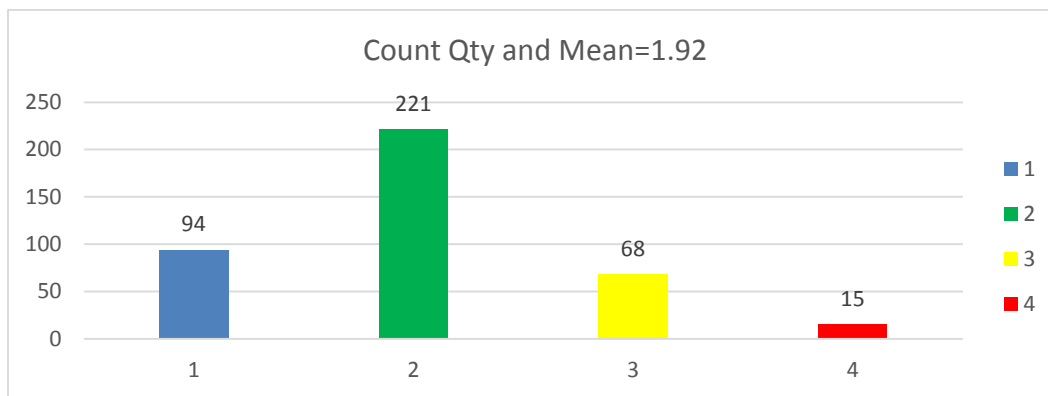


Figure 35: Q18c: *Motivates you to support organizational initiatives (Motivation: Job Duties)*

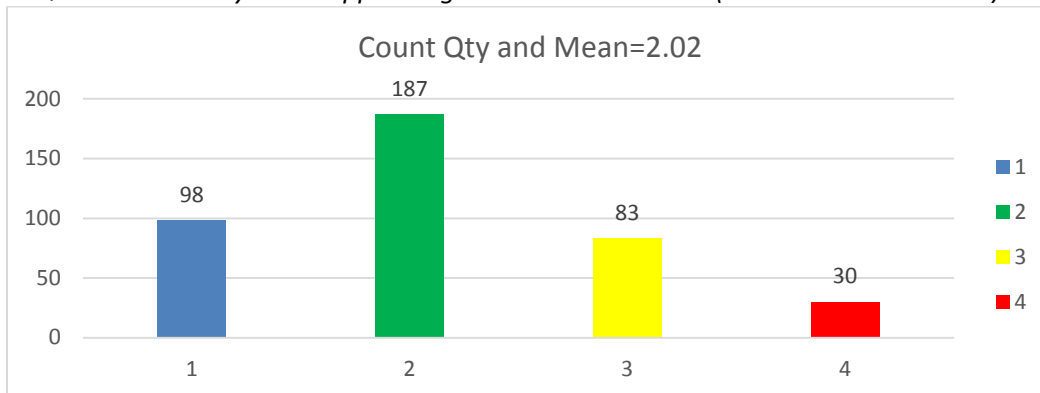


Figure 36: Q18d: *Motivates you by assigning challenging assignments (Motivation: Career Opportunity)*

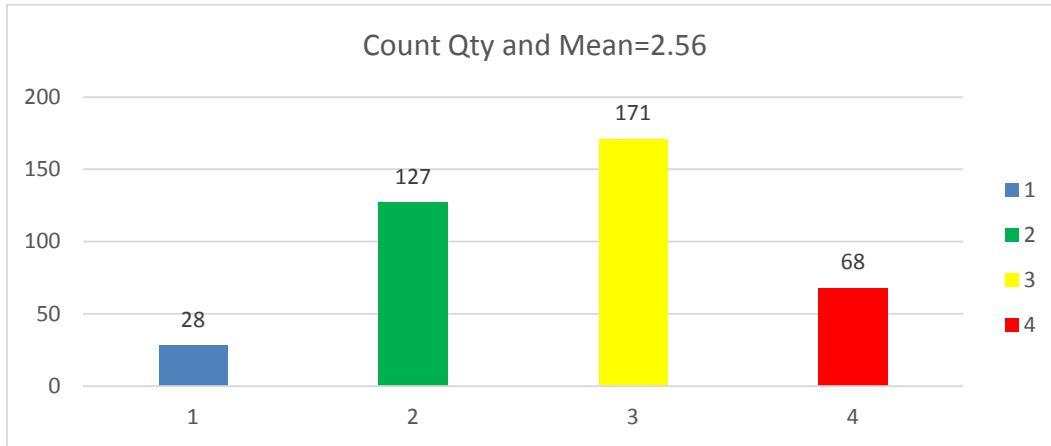


Figure 37: Q18e: *Motivates you to work overtime to support the mission (Motivation: Responsibility)*

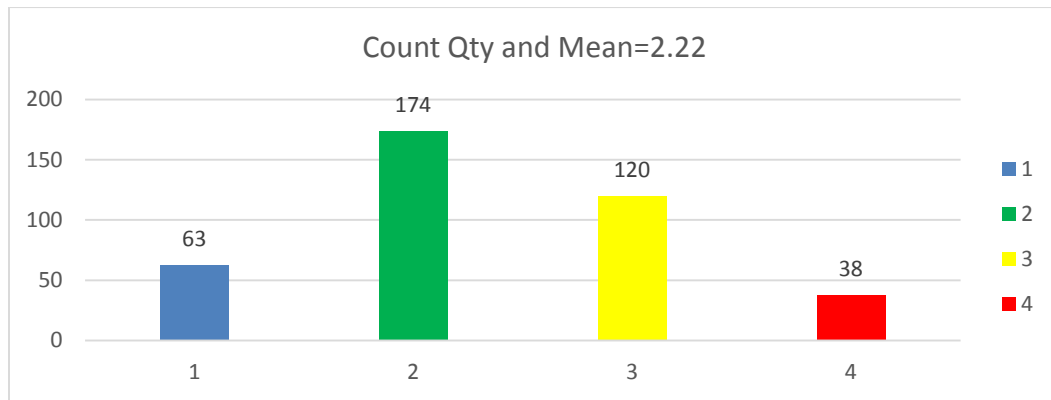


Figure 38: Q18f: *Motivates you by rewarding you for your achievements (Motivation: Achievement)*

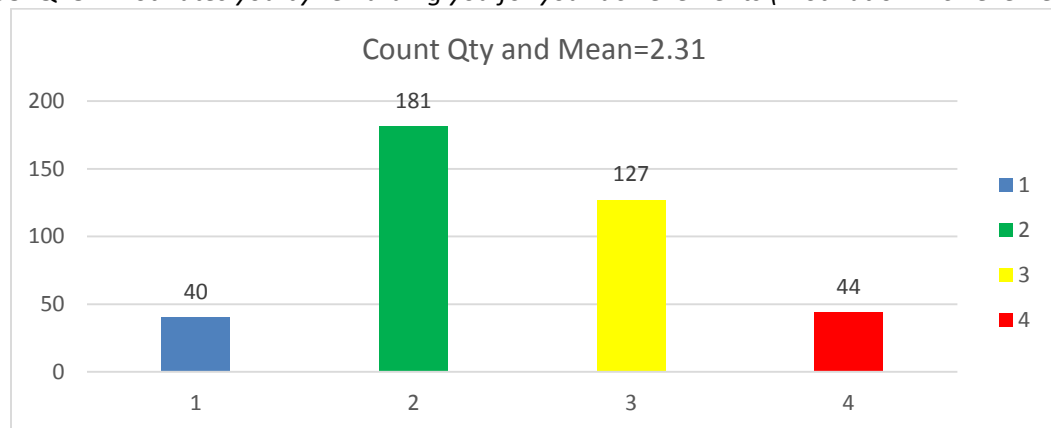


Figure 39: Q18g: *Motivates you to prioritize the organization's initiatives over your own personal interests (Motivation: Responsibility)*

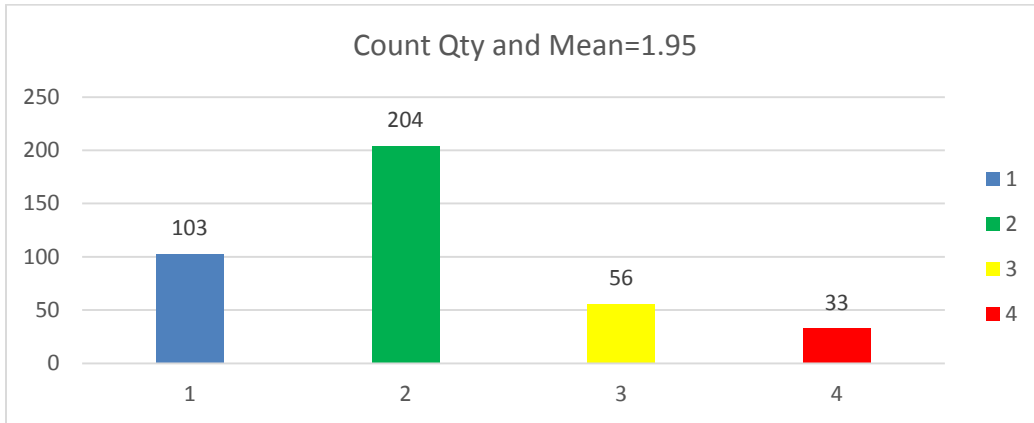


Figure 40: Q18h: *Motivated when your leader acknowledges employees for exceptional performance (Motivation: Achievement)*

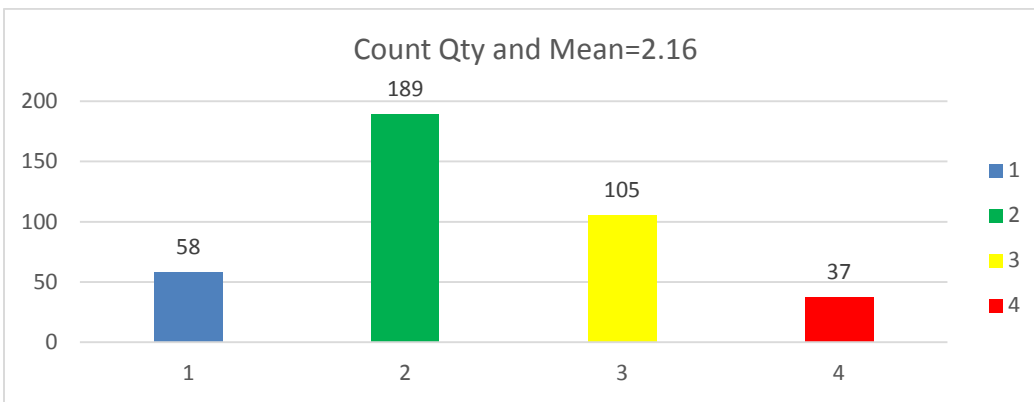


Figure 41: Q18i: *Motivated when your leader informs you of upcoming job openings (Motivation: Career Opportunity)*

Appendix F - TACOM OPSEC Review Certification

TACOM OPSEC REVIEW CERTIFICATION (OPSEC Program is Governed by AR 530-1, Operations Security)							
I am aware that there is foreign intelligence interests in publicly available information; I have sufficient technical expertise in the subject matter to certify that it is appropriate to release this information to the public, because there are no operational, legal, or security reasons for withholding its release. Information that was given a previous OPSEC Review does not require a second review, unless the original information has been changed.							
DESCRIPTION OF INFORMATION TO RECEIVE OPSEC REVIEW							
Title/Description of item to be released: Transformational Leadership and its Relationship to Employee Job Motivation at the TACOM-LCMC							
(STEP 1) Author/Originator Craig Cogar		Organization TACOM-ILSC			Phone # 586-202-5313		
Are you a contractor? YES <input type="radio"/> NO <input checked="" type="radio"/> If YES, Contract #: _____							
Forum where this information is to appear: DAU SSCF							
Purpose of release: Developed as part of DAU SSCF course requirement							
Product Format (check one): <input checked="" type="radio"/> Article <input type="radio"/> Briefing <input type="radio"/> Web Site <input type="radio"/> Equipment Display <input type="radio"/> Video Tape <input type="radio"/> Brochure <input type="radio"/> CD							
(STEP 2) TECH REVIEWER/TEAM LEADER: Michael Rocha				Grade: ADII	Position: DAU SSCF-Warren Faculty		
Signature: ROCHE.MICHAEL.T.1027019516				Grade: ADII	Position: DAU SSCF-Warren Faculty		
(STEP 3) Gov't Supervisor/Assoc Dir: David Kosinski				Grade: ADII	Position: DAU SSCF-Warren Site Lead		
Signature: KOSINSKI.DAVID.ARTHUR.1230272359				Grade: ADII	Position: DAU SSCF-Warren Site Lead		
(STEP 4) Gov't Contracting Officer (if applicable): None							
Signature: [Redacted]				Phone: [Redacted]			
(STEP 5) Legal Office Review (if applicable): Tiffany Hall							
Signature: HALL.TIFFANY.JL.1245179185				Grade: [Redacted]	Position: [Redacted]		
Signature: HALL.TIFFANY.JL.1245179185				Grade: [Redacted]	Position: [Redacted]		
(STEP 6) G2/G3 (OPSEC Officer): Martin T. Terry				Grade: [Redacted]	Position: Cmdr OPSEC Officer		
Signature: TERRY.MARTIN.THOMAS.1230493193				Grade: [Redacted]	Position: Cmdr OPSEC Officer		
Signature: TERRY.MARTIN.THOMAS.1230493193				Grade: [Redacted]	Position: Cmdr OPSEC Officer		
(STEP 7) Public Affairs Reviewer: Eric Emerton				Grade: [Redacted]	Position: PAO		
Signature: EMERTON.ERIC.P.1230527802				Grade: [Redacted]	Position: PAO		
Signature: EMERTON.ERIC.P.1230527802				Grade: [Redacted]	Position: PAO		
Initial and Date in the appropriate box	Author	Tech Reviewer	Gov't Supervisor	Gov't Cont. Officer	Legal	G2/G3 (OPSEC Off)	Public Affairs
a. Concur for Public Release	COGAR, CRAIG AJD/CJG22 11/20/04	ROCHE, MICHAEL T CHRS, T J 02/10/03M	KOSINSKI, DAVID ARTHUR 12/02/03M	[Redacted]	HALL, TIFFANY JL 03/17/03	[Redacted]	EMERTON, ERIC P 12/27/02
b. Concur for Public Release w/Comment	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
c. Nonconcur	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]