INVESTIGATING THE LINKS BETWEEN FEEDBACK ORIENTATION AND LEADERSHIP SELF-EFFICACY IN FIELD GRADE OFFICERS

by

Robby A. Key

Doctoral Study Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Business Administration

Liberty University, School of Business

May 2018
Abstract

A myriad of challenges and shifting strategic priorities face today’s military leaders. Since the military is undergoing substantial change as it adjusts to the changing nature of war and a fluid world situation, Field Grade Officers (FGO) must actively develop and hone their leadership behavior by implementing effective feedback counsel. They must also increase their leadership self-efficacy to confidently accomplish specific leadership tasks and challenges. This non-experimental quantitative correlational research addresses the correlation of leadership self-efficacy and feedback orientation in FGOs. Given the impact of the feedback process on the FGO recipient, it is important to understand differences in how military leaders respond to feedback. Equally, the researcher discussed leadership self-efficacy in military leaders. While there is a considerable amount of existing research on feedback orientation and self-efficacy separately, very little research exists correlating feedback orientation to leadership self-efficacy. The findings of this research demonstrate there is a moderate positive relationship between feedback orientation and leadership self-efficacy within military leadership. By running an organization from a Christian point of view and value, leaders can experience the supernatural power of Christ. Business leaders will gain efficacy in Christ by what they have seen and experienced.

*Key words*: feedback orientation, leadership self-efficacy, learning goal orientation, servant leadership
INVESTIGATING THE LINKS BETWEEN FEEDBACK ORIENTATION AND
LEADERSHIP SELF-EFFICACY IN FIELD GRADE OFFICERS

By

Robby Anthony Key

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Liberty University
May 2018

Dr. Mark Davis, Dissertation Chair

Dr. Edward Moore, Dissertation Committee Member

Dr. Gene Sullivan, DBA, Program Director

Dr. David Calland, Interim Dean, School of Business
Dedications

To My Love, Mary, my biggest cheerleader and confidant. When I was down, she was encouragement. When I was up, she always provided validation that I had the wherewithal to complete this journey. The conclusion of this program would not have come to fruition without her. To another important lady in my life—my Mom, Carrie. Ever since I can remember, she has instilled confidence in me that I could accomplish anything I set my mind to.
Acknowledgments

If we are to boast, boast in the Lord (1 Corinthians 1:31). Christ has taken a below average student and equipped him to achieve what the student did not dream was possible. Praise be to God! I pray that through this program God can use me to further His kingdom. I am grateful for my two favorite people—Maddie and Collin, my daughter and son. The father of godly children will rejoice (Proverbs 23:24). They endured endless nights and weekends of Dad buried in his laptop. A huge thank you to Dr. Mark Davis, my Chair, who kept me vectored at all times and patiently provided wisdom and encouragement from beginning to end. Finally, I am grateful for my father, Tony, for modeling a work ethic of honorable, hard work.
Table of Contents

List of Tables ........................................................................................................................................ viii
List of Figures ......................................................................................................................................... x

Section 1: Foundation of the Study ...................................................................................................... 1
  Background of the Problem ................................................................................................................ 2
  Problem Statement ............................................................................................................................. 3
  Purpose Statement ............................................................................................................................. 4
  Nature of the Study ............................................................................................................................. 5
    Method ........................................................................................................................................... 6
    Quantitative method ...................................................................................................................... 6
    Qualitative method ....................................................................................................................... 6
    Mixed methods ............................................................................................................................. 7
  Design ............................................................................................................................................... 7
    Correlational design ...................................................................................................................... 7
    Descriptive design ....................................................................................................................... 8
    Experimental design .................................................................................................................... 8
  Research Questions .......................................................................................................................... 9
  Hypotheses ....................................................................................................................................... 10

Theoretical Framework ....................................................................................................................... 11
  Feedback Orientation Theory ....................................................................................................... 11
  Leadership Self-Efficacy Theory ................................................................................................... 12

Summary ............................................................................................................................................. 14
Definition of Terms ............................................................................................................................ 14
Assumptions, Limitations, and Delimitations ................................................................. 15
Assumptions .................................................................................................................... 15
Limitations ....................................................................................................................... 16
Delimitations .................................................................................................................... 16
Significance of Study ....................................................................................................... 17
Reduction of Gaps .......................................................................................................... 17
Implications for Biblical Integration .............................................................................. 18
Relationship to Field of Study ......................................................................................... 19
A Review of the Professional and Academic Literature ............................................... 20
Increased Leadership Performance ................................................................................ 22
Demanding work environment ....................................................................................... 23
Authentic leadership ......................................................................................................... 23
Transformational leadership ............................................................................................ 26
Officer development ........................................................................................................ 28
Servant Leadership ......................................................................................................... 30
Servant leadership in business ....................................................................................... 32
Christ leadership ............................................................................................................. 33
Relationships .................................................................................................................... 34
Feedback Orientation ..................................................................................................... 37
Feedback seeking behavior ............................................................................................ 37
Candid feedback ............................................................................................................... 39
Feedback receptivity ........................................................................................................ 42
Feedback intervention in the military .............................................................................. 43
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research question R3</td>
<td>113</td>
</tr>
<tr>
<td>Line officer comparison</td>
<td>114</td>
</tr>
<tr>
<td>Research question R4</td>
<td>115</td>
</tr>
<tr>
<td>Research question R5</td>
<td>116</td>
</tr>
<tr>
<td>Rated officer comparison</td>
<td>118</td>
</tr>
<tr>
<td>Summary of findings</td>
<td>118</td>
</tr>
<tr>
<td>Applications to Professional Practice</td>
<td>119</td>
</tr>
<tr>
<td>Leadership Self-Efficacy Development</td>
<td>119</td>
</tr>
<tr>
<td>Feedback Orientation Development</td>
<td>121</td>
</tr>
<tr>
<td>Biblical Framework</td>
<td>123</td>
</tr>
<tr>
<td>Recommendations for Action</td>
<td>124</td>
</tr>
<tr>
<td>Professional Continuing Education</td>
<td>124</td>
</tr>
<tr>
<td>Position Rotation</td>
<td>125</td>
</tr>
<tr>
<td>Feedback-Seeking Behavior</td>
<td>125</td>
</tr>
<tr>
<td>Executive Coaching Intervention</td>
<td>126</td>
</tr>
<tr>
<td>Human Resource Management Intervention</td>
<td>127</td>
</tr>
<tr>
<td>Recommendations for Further Study</td>
<td>128</td>
</tr>
<tr>
<td>Causation</td>
<td>128</td>
</tr>
<tr>
<td>Actual Behavioral Change</td>
<td>129</td>
</tr>
<tr>
<td>Leadership Characteristics’ Impact</td>
<td>129</td>
</tr>
<tr>
<td>Leadership Self-Efficacy Optimal Level</td>
<td>130</td>
</tr>
<tr>
<td>Public and Private Sector Leaders</td>
<td>130</td>
</tr>
<tr>
<td>Other Military Bases</td>
<td>131</td>
</tr>
</tbody>
</table>
Reflections ........................................................................................................................................... 131
Biblical Principles .............................................................................................................................. 132
Summary and Study Conclusions ................................................................................................. 133
References ....................................................................................................................................... 135
Appendix A: Participant Consent Form .......................................................................................... 151
Appendix B: Leader Efficacy Questionnaire Approval ................................................................. 153
Appendix C: Feedback Orientation Scale ...................................................................................... 154
Appendix D: Instrument Sample Questions .................................................................................. 156
Appendix E: IRB Exemption ........................................................................................................... 158
List of Tables

Table 1. Frequency Distribution of Gender ................................................................. 98
Table 2. Frequency Distribution of Rank ................................................................. 99
Table 3. Frequency Distribution of Line Officers ....................................................... 99
Table 4. Frequency Distribution of Aeronautical Rated Officers................................. 99
Table 5. Frequency Distribution of Years Served in the Military .............................. 100
Table 6. Frequency Distribution of FOS Total Scores .............................................. 100
Table 7. Descriptive Statistics of FOS Scores ........................................................... 101
Table 8. Skewness and Kurtosis of FOS Scores ........................................................ 102
Table 9. Shapiro-Wilk Test of FOS Total Scores ....................................................... 104
Table 10. Frequency Distribution of LEQ Total Scores .......................................... 105
Table 11. Descriptive Statistics of LEQ Scores ......................................................... 105
Table 12. Skewness and Kurtosis of LEQ Total Scores ............................................ 106
Table 13. Shapiro-Wilk Test of LEQ Total Scores ................................................... 108
Table 14. Pearson Correlation Coefficient for Null Hypothesis $H_{01}$ .................... 110
Table 15. Spearman’s rho for Null Hypothesis $H_{01}$ .............................................. 111
Table 16. Pearson Correlation Coefficient for Line Officer Null Hypothesis $H_{02}$ ... 112
Table 17. Spearman’s rho for Line Officer Null Hypothesis $H_{02}$ .............................. 112
Table 18. Pearson Correlation Coefficient for Non-Line Officer Null Hypothesis $H_{03}$ ... 113
Table 19. Spearman’s rho for Non-Line Officer Null Hypothesis $H_{03}$ ..................... 114
Table 20. Pearson Correlation Coefficient for Rated Officer Null Hypothesis $H_{04}$ 115
Table 21. Spearman’s rho for Rate Officer Null Hypothesis $H_{04}$ ............................ 116
Table 22. Pearson Correlation Coefficient for Non-Rated Null Hypothesis $H_{05}$ .... 117
Table 23. Spearman’s rho for Non-Rated Officer Null Hypothesis $H_05$ .............................................. 117
List of Figures

Figure 1. Leadership performance framework................................................................. 22
Figure 2. Dimensions of FOS ....................................................................................... 80
Figure 3. Dimensions of LEQ...................................................................................... 83
Figure 4. Frequency histogram of FOS scores............................................................... 102
Figure 5. Q-Q plot of FOS scores ................................................................................ 103
Figure 6. Frequency histogram of LEQ scores............................................................... 106
Figure 7. Q-Q plot of LEQ scores................................................................................ 107
Section 1: Foundation of the Study

United States Air Force (USAF) organizations are multifaceted, generating a broad range of leadership challenges for Field Grade Officers (FGO). FGOs are military officers holding the ranks corresponding to Major, Lieutenant Colonel, and Colonel. They must organize, train, and equip their units to tackle a broad range of missions and must balance the welfare and safety of their units with the need to attain success in missions that hold inherent dangers. FGOs must also establish an environment within their units that promote ethical decision-making in often ambiguous situations and must cultivate and maintain technical and tactical expertise required of their professions as leaders (Morath, Leonard, & Zaccaro, 2011). Today’s FGOs face a multitude of challenges and responsibilities—some of which are enduring and some of which are new. FGOs must be equipped to execute diverse missions in unique and rapidly changing conditions to quickly make sense of situations, reach decisions, formulate plans, and adjust to unexpected outcomes. In essence, military officers must still lead men and women into harm’s way.

In the Air Force, FGOs are typically assigned to squadron and group commander positions, which can be compared to middle to upper-level managers in the private sector. To meet these associated leadership challenges, Air Force FGOs must not only hold specific aerospace knowledge, skills and abilities, but also leadership self-efficacy that provides the psychological context required to successfully employ leadership to the enlisted force across a spectrum of global challenges. Past research has focused a certain amount of depth on the situational influence that business environments have on leadership; however, the unique and highly stressful environment confronted by military leadership have received considerably less examination (Campbell, Hannah, & Matthews, 2010). The lion’s share of developmental
military leadership experiences in the past include tackling adversity, facing the unknown, and struggling with the unfamiliar (McCall, 2004). These broad categories of leadership experiences include challenging assignments abroad, exposure to other people and cultures, hardships, and personal events. Nevertheless, critical feedback can enhance the value of FGO leadership experiences.

Background of the Problem

Since FGOs’ operational environment is multifaceted, research focusing on the correlation between feedback orientation and leadership self-efficacy in a dynamic environment is warranted. Dahling, Chau, and O’Malley (2012) argued that feedback orientation is thought to be a major piece of specific leadership performance processes, but very little empirical research exists to support these propositions. According to Hannah, Avolio, Walumbwa, and Chan (2012), previous research has been narrowly focused on leaders’ self-efficacy for what they believe they can do, and often in narrowly defined tasks and contexts, which likely underestimates the complex and dynamic contexts that most leaders and followers operate.

In this research, feedback orientation includes elements such as feedback receptivity, valuing feedback, and actively seeking feedback. Feedback in this context represents an FGO’s belief that feedback regarding personal performance can lead to positive outcomes and guide the officer to achieve personal leadership goals or objectives. Moreover, FGOs with a high feedback orientation are better able to manage and restrain their emotional reactions to feedback, will intentionally process feedback cognitively, and will successfully employ feedback to establish objectives to improve personal performance (Dahling et al., 2012). The willingness to seek negative feedback is consistent with the behavioral response patterns that learning-goal-oriented individuals engage in when they face an arduous, challenging situation, such as the possibility of
negative feedback (Dahling et al., 2012). By requesting feedback, military officers risk the embarrassment of revealing their insecurity or uncertainty and risk drawing attention to their performance deficiencies. Conversely, by requesting feedback about successful performance, FGOs can attempt to create and enhance a favorable image with a given target (VandeWalle, 2003).

Leader self-perception is shaped in the context of behaviors and progresses slowly in an ongoing learning process in which the leader amasses information from various sources with regard to the ability to function in a variety of areas (Popper, Amit, Gal, Mishkal-Sinai, & Lisak, 2004). Self-efficacy is one’s belief in his or her capability to organize and implement the course of action required to generate specific fulfillments (Bandura, 1997). Military officers who believe in themselves and in their abilities to perform tasks successfully are better suited to leadership roles than military leaders who do not believe in themselves. Indeed, studies have shown this self-belief is significant in the context of leadership (Popper et al., 2004). Bozer, Sarros, and Santora (2013) suggested that leaders with strong self-efficacy were more willing to engage in leadership change efforts than leaders who were more doubtful of their capabilities. Therefore, a leader with high self-efficacy is more likely to tackle significant behavioral change than a person with a low self-efficacy. Not surprisingly, these behavioral characteristics are positively linked to increased performance and achieving personal goals.

Problem Statement

The problem to be addressed in this research is there is very little research addressing the correlation between feedback orientation and leadership self-efficacy in FGOs and how each characteristic in concert influence leadership performance. Reducing this gap is important as FGOs receiving feedback are likely to use feedback to improve their leadership performance in
concert to their feedback orientation level. Hence, effective feedback can influence their perception of satisfaction with feedback. Preferably, military officers and peers will engage in reciprocal feedback that bolsters their relationship and results in positive outcomes. Rasheed, Khan, Rasheed, and Munir (2015) contended if those receiving feedback possess low feedback orientation and perceive feedback to be worthless and are dissatisfied with it, they will probably disregard the feedback. In strong feedback environments, employees who are not favorably disposed towards feedback may reduce feelings of self-efficacy, given that supervisors may be seen as overbearing, emasculating an employee’s abilities (Gabriel, Frantz, Levy, & Hilliard, 2014). Lester, Hannah, Harms, Vogelgesang, and Avolio (2011) described how trust and a feedback-seeking orientation can influence the development of leader efficacy in less experienced individuals. In addition, the lack of leadership self-efficacy in decision-making, according to Hannah et al. (2012), can diminish the extent leaders employ their analytic skills. Thus, the focus of this research is to investigate the correlation between feedback orientation and leadership self-efficacy in FGOs.

**Purpose Statement**

The purpose of this non-experimental quantitative research was to demonstrate if FGO leadership self-efficacy is positively or negatively correlated to FGO feedback orientation. Those officers that have a high feedback orientation will, in most instances, actively seek candid feedback. Lam, Huang, and Snape (2007) posited that feedback seeking by leaders encouraged improved performance, at least in part because such behavior enhanced the quality of the relationship between employees and their immediate supervisors. Moreover, because the core responsibility of FGOs is providing direction and leadership, the type of feedback elicited from feedback oriented FGOs will be leadership in nature. Once valuable feedback is received, FGOs
have the opportunity to process the feedback and determine which personal leadership behaviors are ineffective, and should change, and which leadership behaviors are effective, or should continue. Since effective FGO leadership requires complex social problem-solving skills, FGOs must continually build upon their leadership acumen by testing leadership strategies in different contexts.

This research demonstrated if FGO leadership self-efficacy was positively or negatively correlated to FGO feedback orientation. Leaders that have a high self-efficacy normally picture success scenarios that offer effective guides for behavior, and they mentally rehearse sound solutions to hypothetical difficulties (Hannah et al., 2012). The positive guides for performance are often the result of feedback. Likewise, because of past constructive feedback, leaders that have high self-efficacy possess a guide that illustrates leadership behavior that should not be employed. The results of the research should provide clarity on the relationship between an FGO’s feedback orientation and leadership self-efficacy. The researcher’s role was pivotal in developing and ensuring accurate results in this research.

Nature of the Study

This study used a non-experimental quantitative research method using a correlation design. The research setting included a population of leaders, specifically Air Force Field Grade Officers (FGO), serving in various specialties with different leadership backgrounds. In this quantitative design, survey data were collected to investigate if the same factors that influence FGO leader self-efficacy influence FGO feedback orientation. It was important to clearly define the research method and design in the beginning to provide a framework for the research methodology.
Method

Scholarly research entails three types of methods, which are quantitative, qualitative, and mixed methods (Creswell, 2014). This portion of the study contains a discussion of each method to support the justification behind the researcher’s selection of methodology. The justification includes past literature research explaining the suitability for the specific selection.

**Quantitative method.** The researcher pursued a quantitative strategy for this research. During this quantitative research, the researcher purposefully sought to explore relationships between specific variables. This methodology also followed the framework of previous research conducted. Seibert, Sargent, Kraimer, and Kiazad’s (2016) quantitative study demonstrated that a manager’s exposure to developmental experiences positively related to a supervisor’s assessment of the manager’s leadership effectiveness through the manager’s leadership self-efficacy. Quantitative findings concerning the connection between feedback orientation and leadership self-efficacy will indicate that this type of research is beneficial for military organizations. Quantitative statistical processes are a way of determining if one variable is correlated with another variable. Researchers frequently generate hypotheses that can be tested in experimental research to validate the correlation (Walker, 2005). Since qualitative research aims at understanding one thing well—one phenomenon, such as the relationship of traits among the phenomenon (Stake, 2010), a quantitative approach was employed to explore the correlation between two variables.

**Qualitative method.** The researcher chose not to pursue a qualitative strategy. Qualitative research tends to be more at the micro level exploring specifics, this type of research is often interpretive, which means the research is somewhat subjective and open to questions (Stake, 2010). In contrast, quantitative researchers take the statistical analysis approach instead.
of the interpretive approach. Stake (2010) compared qualitative to quantitative by asserting very little interpretation is required with quantitative research, while qualitative research requires substantial interpretation. Also, the problem identified did not suit qualitative research because interpretive research related to the FGO’s personal experiences would not offer a large enough sample of the population to understand the relationship between feedback orientation and leadership self-efficacy (Privitera, 2013).

**Mixed methods.** The researcher chose not to pursue mixed methods strategy. Researchers should consider a mixed methods design only when the qualitative or quantitative approach, each in isolation, is insufficient to understand a research problem (Creswell, 2014). Researchers should be careful to not rely on the combination of quantitative and qualitative data based solely on the administration of one research instrument. This technique does not represent a true integration of quantitative and qualitative research because one will tend to be subordinate to the other (Bryman, 2006).

**Design**

There are three levels of quantitative research design: correlational, descriptive, and experimental (Walker, 2005). Researchers should select a design that is appropriate for specific research methodologies based on the research problem (Creswell, 2014).

**Correlational design.** The researcher chose a correlational design for this research. A non-experimental form of research is the correlational design in which investigators use the correlational statistic to describe and measure the degree, association, or relationship between two or more variables or sets of scores (Creswell, 2014). Correlation is a bivariate exploration that assesses the strengths of connection between two variables and the direction of the relationship (Salkind, 2013). Thereby, allowing the researcher to identify whether variables tend
to move in the same or opposite direction when they change. Because past similar research completed correlational designs, the researcher believed a correlational research design was appropriate. Janssen and Prins (2007) used a correlational design to confirm learning-approach goal orientation is positively related to feedback orientation in hospital leadership. Hannah et al. (2012) utilized a correlational design to assess the relationship between leadership self and means efficacy and the learning goal orientation in leaders.

**Descriptive design.** A descriptive design was not appropriate for this research. Researchers employing descriptive research evaluate the attributes of individuals, groups or environments that are a part of more complex designs (Walker, 2005). The principal objective is to discover new significance, expound on the phenomenon, understand the frequency with which the phenomenon occurs and classify information (Walker, 2005). Researchers present an analysis of the measures, frequency, and percentage of existing data or survey data, and what the data shows when applying descriptive statistics (Salkind, 2013). With descriptive research, researchers are simply describing what is or what the data shows. Descriptive research does not allow researchers to reach conclusions beyond the data they have analyzed or make conclusions concerning any hypotheses they might have made (Walker, 2005).

**Experimental design.** This research did not employ an experimental design. Experimental research, in comparison to the other designs, provides the framework for establishing a link between cause and effect (Christensen, Johnson, Turner, & Christensen, 2011). During the experimental phase, the researcher uses deductive reasoning to prove or disprove a hypothesis. The experimental phase normally involves manipulating the cause (independent variable) and observing the result on the effect (dependent variable) while holding extraneous variables constant (Walker, 2005). The type of correlational analysis the researcher
chose in this study does not manipulate the independent variable; therefore, an experimental
design was not appropriate.

The researcher pursued a quantitative correlational strategy for this research. The
quantitative statistical process is a method of determining if one variable correlates with another
variable. Thus, the researcher purposefully sought to explore relationships between feedback
orientation and leadership self-efficacy through a correlational research design. The research
question forms the basis for this quantitative correlational research.

Research Questions

In this research, the researcher investigated the relationship between the feedback
orientation variable and the leadership self-efficacy variable in FGOs, thereby understanding
how these two variables influence leadership competence. This research also focused on
contrasting the degree of correlation between feedback orientation and leadership self-efficacy in
line officers and non-line officers and in aeronautical rated officers and non-rated officers.
R1: Is there a statistically significant correlation between feedback orientation and leadership
self-efficacy in Field Grade Officers?
R2: Is there a statistically significant correlation between feedback orientation and leadership
self-efficacy in Field Grade Line Officers?
R3: Is there a statistically significant correlation between feedback orientation and leadership
self-efficacy in Field Grade Non-Line Officers?
R4: Is there a statistically significant correlation between feedback orientation and leadership
self-efficacy in Field Grade Rated Officers?
R5: Is there a statistically significant correlation between feedback orientation and leadership
self-efficacy in Field Grade Non-Rated Officers?
Hypotheses

The hypotheses are associated to the research problem since they correspond by testing the null hypotheses regarding the statistically significant relationships between the independent variable and the dependent variable. The corresponding null hypotheses (H<sub>0</sub>) and alternative hypotheses (H<sub>a</sub>) for the research question are:

H<sub>a</sub> 1: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Officers.

H<sub>0</sub> 1: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Officers.

The following hypotheses examined the level of correlation between feedback orientation and leadership self-efficacy among different groups of FGOs; specifically, comparing line officers to non-line officers and comparing aeronautical rated officers to non-rated officers.

H<sub>a</sub> 2: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

H<sub>0</sub> 2: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

H<sub>a</sub> 3: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

H<sub>0</sub> 3: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

H<sub>a</sub> 4: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.
H₀⁴: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.

Ha₅: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Rated Officers.

H₀₅: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Rated Officers.

**Theoretical Framework**

As military organizations concentrate on enhancing leadership performance, FGO feedback orientation and leadership self-efficacy continue to be of great importance. From the current body of literature, the researcher based the theoretical framework for this non-experimental quantitative research on feedback orientation theory and leadership self-efficacy theory.

**Feedback Orientation Theory**

Feedback orientation theory, as suggested by London and Smither (2002), is a construct consisting of multiple levels that function together to determine one’s overall receptivity to feedback and the extent to which one welcomes direction and coaching. Feedback orientation embraces the belief in the likelihood of behavioral change, reception of feedback, and motivation to enhance performance based on feedback (London & Smither, 2002). Feedback seeking is a type of intentional behavior that is expected to influence performance judgments positively. Military leaders who are more oriented toward learning should be less susceptible to fears over possible performance failure. Moreover, FGOs who have access to feedback should experience less uncertainty related to colleague perceptions. For example, Janssen and Prins (2007) argued that seeking information to improve one’s self-attributes may reveal uncertainty to others and
draw attention to competency deficiencies that conflict with the purpose of appearing competent or the purpose of not looking incompetent. However, leaders with a feedback orientation are less likely to protect their ego from the threat of negative feedback as well as the desire to avoid creating an unfavorable image (Janssen & Prins, 2007). As a result, leaders who are oriented toward learning or have access to feedback should be less vulnerable to diminishing returns in leadership performance due to personal blind spots (DeRue & Wellman, 2009). Vancouver and Morrison (1995) found that individuals' perceptions of the quality of their relationship with persons imparting the feedback moderates the relationship between self-esteem and information seeking. Hence, although information seeking research has provided valuable insights into self-regulation, the ability to monitor and control one’s behavior, emotions, or thoughts, to some extent, has managed in identifying personal qualities associated with more and less effective self-regulation through information seeking (Brown, Ganesan, & Caligula, 2001). Similarly, Avolio and Hannah (2008) explained that leaders with increased knowledge via feedback would have a solid starting point that would enable them to increase their competence in response to new experiences.

**Leadership Self-Efficacy Theory**

Leadership self-efficacy builds upon the theoretical foundation of general self-efficacy. Leadership self-efficacy is a type of efficacy linked with the amount of confidence in the knowledge, skills, and abilities in FGOs coupled with guiding and leading others (Hannah, Avolio, Luthans, & Harms, 2008). Essential to the increase in leadership performance is the ability to push leaders to reflect on learning experiences to encourage the transfer of knowledge and abilities to work contexts (Amagoh, 2009). Amagoh (2009) explained that a more developed leader can integrate aspects of the self with requirements of a leadership role. The connection
between self-efficacy and ability to lead seems somewhat clear. In much of the literature, researchers claim that leaders who are confident in their competence and in their capacity to perform tasks successfully are better prepared for leadership roles than those who do not believe in themselves. Leaders with high self-efficacy have stronger intent to achieve goals and are often shown to be more persistent and usually have more positive thoughts and attitudes towards the task than individuals with low self-efficacy (Bandura, 1997). Accordingly, this type of leader tends to realize higher performance outcomes. Indeed, studies have shown that this self-belief is critical in the context of leadership (Popper et al., 2004). Brown et al. (2001) asserted that self-efficacy beliefs moderate the success with which individuals employ information seeking to improve leadership role elucidation and work performance. For example, leaders with high self-efficacy should be better able to elucidate role expectations by pursuing information. In contrast, leaders with low self-efficacy tend to be sidetracked by upsetting negative thoughts and are more susceptible to negative cognitive biases and uncertainties about their abilities (Avolio & Hannah, 2008). Based on Bailey and Austin’s (2006) study, self-efficacy for personal development was found to significantly moderate the connection between feedback received from sources and changes in ratings. They found that focal individuals who are somewhat confident in their abilities respond more positive to favorable ratings from their coworkers, although focal individuals who are not confident in their abilities respond more positively to favorable ratings from their supervisor. Bailey and Austin (2006) suggested that having confidence in one’s ability appears to relate to who is perceived as a useful source of feedback. Specifically, leaders who have self-efficacy in their capabilities rely on coworker’s feedback as an indication of performance, while those with low confidence rely more on upper management,
as this group has direct authority and supervisory responsibility over the leader (Bailey & Austin, 2006).

Summary

Both feedback orientation theory and leadership self-efficacy theory support the notion that FGOs can enhance knowledge, enthusiasm, and most importantly, performance by decreasing uncertainty, offering critical information about individual goal progress, confirming individuals’ perceptions about themselves and their accomplishments, and boosting attitudes of competence (London, 2003). This notion is important since competence signifies a leader’s perceived level of self-efficacy in his or her position or level of mastery. Support for a correlation between supervisor feedback environment and competence stems from social cognitive theory (Gabriel et al., 2014). Social cognitive theory suggests that self-efficacy predicts not only effort but the willingness to approach new and more challenging situations (Bandura, 2001). Thus, both theories suggest leaders with high feedback orientation and leadership self-efficacy are also likely to seek promotion to higher levels of leadership responsibility and to demonstrate confidence, persistence, and competence (London, 2003).

Definition of Terms

Aeronautical Rated Officer: The USAF awards an aeronautical rating to a member who has completed specific training leading to professional qualification in primary aviation skills. These are typically pilot, navigator, and air battle manager positions.

Company Grade Officer: A commissioned officer in the United States Army, Air Force, or Marines holding the rank of Second Lieutenant, First Lieutenant, and Captain. In the same order, Navy commissioned officer ranks commensurate with the other branches are Ensign, Lieutenant Junior Grade, and Lieutenant.
**Field Grade Officer:** A commissioned officer in the United States Army, Air Force, or Marines holding the rank of Major, Lieutenant Colonel, or Colonel. In the same order, Navy commissioned officer ranks commensurate with the other branches are Lieutenant Commander, Commander, and Captain.

**Line Officer:** A commissioned officer who exercises general command authority. Examples of non-line officers include Chaplains, Physicians, and Judge Advocate General “JAG” attorneys.

**Time in Grade:** A specific period of time at a military grade level before becoming eligible for promotion to the next higher-grade level.

**Assumptions, Limitations, and Delimitations**

**Assumptions**

It is assumed that most FGOs would naturally seek to develop their leadership skills based on their military rank and leadership responsibilities. In fact, Sweeney (2010) discovered evidence indicating that military leaders who displayed competence before combat operations increased followers’ trust and confidence in the leader. This data suggests that FGOs could benefit from formal and on-the-job training that builds leadership competence. A principal reason the researcher chose to focus on FGOs rather than other military ranks is FGOs are considered the equivalent of a mid-level executives or managers in the civilian sector. In general, mid-level executives have garnered a good deal of leadership experience, yet they require continual challenging environments to enhance their ability to guide a unit or group.

Additionally, survey results from FGOs serving in Air Force units stationed at Robins Air Force Base (AFB) Georgia are assumed to represent Air FGOs serving worldwide. Most Air Force units, especially active duty units, are made up of officers who are originally from...
locations throughout the United States allowing the researcher to sample individuals with diverse backgrounds. The researcher verified through unit demographic metrics that the majority of FGOs serving in these units have lived or have been assigned outside the Southeastern United States at some point in their career. At the beginning of the survey instrument, the researcher requested background information from each respondent detailing his or her experience (years in service) and specific status (e.g., rated officer, line officer). Not only will this data assist in analyzing a variety of background categories, but also ensure there is a diversity of respondents.

**Limitations**

This research was limited to a sample from Robins AFB located in the Southeastern United States. The smaller population size of one U.S. Air Force base may not reflect the perceptions of U.S. Field Grade Officers worldwide. Application of the findings may not apply to other professions due to the nature of the leadership environment. Since the participants’ responses were voluntary, the noncompulsory nature of participant participation restricts data to only those who are interested in participating in the research.

**Delimitations**

The researcher chose FGOs as participants in the research rather than company grade officers (CGO’s) because the level of responsibility and leadership required for FGOs is much greater compared to CGO’s. CGO’s level of responsibility stems mainly from the lack of experience and perceived roles. The surveys included closed-ended Likert scale responses, rather than additional open-ended responses, which normally discourages the willingness of individuals to participate in drawn-out surveys. The selection of Robins AFB to perform the field study hinged on the proximity of several Air Force units within a geographical area. Limiting the research to Robins AFB restricts the total population of FGOs available to survey to
a lower number. Nevertheless, the sample size is sufficient for correlation analysis using parametric and nonparametric tests, such as Pearson correlation coefficient and Spearman rho respectively. Some researchers have argued that one cannot use parametric tests in research since the sample size is overly small (Norman, 2010). Norman’s (2010) counter argument is zero evidence exists that nonparametric tests are more suitable than parametric tests when sample sizes become smaller.

**Significance of Study**

This research will bridge the gap in the understanding and effective business leader practice of feedback orientation and leadership self-efficacy. Also, in the field of military leadership, the research will offer a biblical framework for research application. The role of feedback and self-efficacy provide ample evidence of the relationship to the field of military leadership.

**Reduction of Gaps**

One potential moderator not yet investigated in leadership research is the willingness of leaders themselves to enhance their leadership behavior (Hannah & Avolio, 2010). This behavior is rather unexpected considering that firms in the U.S. purportedly spend over $10 billion on leadership programs every year with little evidence of those programs’ success (Hannah & Avolio, 2010). Feedback orientation and leadership self-efficacy have been uniformly studied in the context of leadership performance. However, the relationship linking the two areas has received little attention—not much evidence exists that directly links feedback orientation to leadership self-efficacy. Rasheed et al. (2015) contended that if those receiving feedback have low learning goal orientation and perceive feedback to be worthless and are dissatisfied with it, they will probably disregard the feedback. Furthermore, learning goal
orientation has been found to be positively correlated to leadership self-efficacy (Rasheed et al., 2015). Thus, feedback orientation should increase FGO’s predisposition to participate in new tasks and to learn and develop from those tasks, enhancing levels of self-efficacy. Feedback orientation is a construct that has capacity in helping to clarify how and whether the feedback is used successfully in the high echelons of the military (Hannah et al., 2012). Similarly, although there have been some efforts to develop a concise definition of leader self-efficacy, previous research has been focused on leaders’ self-efficacy for what they believe they can do in narrowly defined tasks and contexts (Hannah et al., 2012).

**Implications for Biblical Integration**

Implications for Biblical Integration

By running an organization from a Christian point of view and value, leaders can experience the supernatural power of Christ. Business leaders will gain efficacy in Christ by what they have seen and experienced. The most important aspect of gaining “Christ-efficacy” is having the courage to make bold decisions that stand up for Christ even when the secular world says that Christian values are wrong. Leading an organization can sometimes seem arduous and lonely; nonetheless, one aspect of living for Jesus is the complete assurance that even in the most difficult moments, we are not alone. Because of this unconditional assurance, business leaders can conquer their fears and demonstrate authentic self-efficacy through Christ. The outcome for building Christ-efficacy in a leader can be very meaningful. For instance, if the leader honors God in his or her belief and faith that God is able, and if it is in His will, then God will complete the assignment using the leader as the instrument. Jesus promised, “I am the vine; you are the branches. If you remain in me and I in you, you will bear much fruit; apart from me you can do nothing” (John 15:5, NIV).
No leader is perfect enough never to need some words of counsel and correction from the people God puts in one’s presence. Solomon had much to say about criticism in Proverbs regarding advice, correction, and discipline. In Proverbs 15:31-32 (NIV) he wrote, “Whoever heeds life-giving correction will be at home among the wise. Those who disregard discipline despise themselves, but the one who heeds correction gains understanding.” Because God cares about the personal development of everyone, He uses people and circumstances to convey specific learning opportunities that can potentially increase personal growth. Van Duzer (2010) suggested that investing in individuals’ unique talents gives both the organization and the individual the ability to flourish in their work roles. Encouragement can be good for the soul. In the four gospels and numerous letters of the New Testament, they speak of encouragement and building each other up. We often believe this only involves positive feedback. However, sometimes, out of love, it involves imparting candid feedback. Proverbs 27:17 (NIV) reminds us, “As iron sharpens iron, so one person sharpens another.” The result is a sharper and stronger leader. Counsel and correction can do no better for those in the position of leadership than their willingness to accept them.

**Relationship to Field of Study**

There is abundant evidence that confirms leadership constructs in the military will continue to evolve. Military officers encounter many unanticipated and complex challenges that have the potential to threaten America’s very existence, such as the rise of global terrorism that potentially undermines national and international security (Day & Harrison, 2007). In this demanding environment, Campbell et al. (2010) argued the need for more information about the relationship of context and leadership theory and how contingencies play a critical role in our understanding of effective military leadership. Researchers have recognized the multilevel
nature of military organizations over the years; nonetheless, only recently have attempts been made to explicitly incorporate multilevel contexts because of advances in multilevel theory and modeling capabilities (Day & Harrison, 2007).

Like their counterparts in multinational commercial or public organizations, military leaders are increasingly called upon to operate in teams marked by a stress on cooperation and broad participation in decision-making (Shamir & Ben-Ari, 2000). The move to organic structures is the outcome of the need for versatility and adaptability among the armed forces and the growing expectation they are modular units capable of combining with other forces for varying missions. Such developments will be reinforced by the influx of new technologies strengthening decentralization. It is within such situations that leadership, as opposed to "mere" management, has become so important (Shamir & Ben-Ari, 2000). Clearly defined roles and predictable behaviors characterize mechanistic organizations. Organic organizations feature high role-ambiguity and shifting relationships that cannot always be predicted with certainty. Studies have shown that leader traits, behaviors and styles are not equally effective under all circumstances (Shamir & Ben-Ari, 2000). Leadership depends on contingencies as the task, technology, characteristics of followers, and stress in each situation. Rapid changes in the contingencies facing military leaders further compound the difficulties of leading organic systems.

**A Review of the Professional and Academic Literature**

Past studies have described the critical competencies for 21st-century leaders in various public sectors. These competencies typically include a capability to deal with cognitive complexity, cope with the unknown, intellectual agility, a level of self-awareness, and an enhanced understanding of the relationships among organizational sub-systems and how they
influence the dominate climate (Ulmer, 1998). Competent 21st-century military leaders embody the same competencies by cultivating trust, setting the example, inspiring confidence, and continually developing personal leadership acumen (Morath et al., 2011).

Over the past decade, the wars in Iraq and Afghanistan have forced military officers to make life and death battlefield decisions under conditions of unprecedented stress. Since leadership and the military officer are practically inseparable, individually, each FGO must view leadership development as necessary to his or her overall growth. The servant leadership model is one of the most attractive leadership methods receiving a great deal of interest. Numerous effective military leaders in a range of specialties have embraced the servant leadership concept. A key component to leadership development involves the tendency to seek and implement valuable feedback. According to Renn and Fedor (2001), unless leaders are determined and motivated to pursue feedback, it is unlikely that they will choose to do so.

Another critical component to leadership development is cultivating leadership self-efficacy. For example, when a leader has developed self-efficacy for a specific ability, it will produce goals, expectations, and self-improvement plans that drive their engagement towards greater mastery and thus development (Hannah et al., 2008). Furthermore, VandeWalle (2003) suggested that high learning goal orientation among leaders influences how they cognitively process the cost and significance of feedback-seeking opportunities. The leadership development outcomes resulting from increased feedback orientation, leadership self-efficacy, and learning goal orientation are transformational leadership, servant leadership, authentic leadership, and military leadership acumen. Again, the relationship between self-efficacy and the feedback process is not as straightforward as expected. Thus far in previous research, no
direct relationship (Figure 1) has been found between self-efficacy and feedback seeking (Brown et al., 2001; Renn & Fedor, 2001).

![Figure 1. Leadership Performance Framework]

**Figure 1.** Leadership performance framework.

**Increased Leadership Performance**

There is a relatively long history of leadership performance theory and research spanning decades. If firms are to capitalize on their return on performance investment, leadership research should go beyond the question of how to better develop leaders and should also include how organizations can get leaders and their organizations ready to develop (Hannah & Avolio, 2010). Contributing to the theory of leader performance readiness, Hannah and Avolio (2010) examined leaders’ motivation and ability to develop and suggested that leaders’ performance readiness is an attribute of two parameters—motivation of the leader and his or her ability to develop. Likewise, Morath et al. (2011) posited that current and emerging military leadership doctrine emphasizes the development of leadership qualities such as resourcefulness, creativity, and the
motivation and ability to engage in continuous learning as necessary for leadership success in modern and future operating environments.

**Demanding work environment.** Scholars in the field of leadership have long considered demanding work experiences to be a critical input in the practice of developing individuals’ leadership skills. DeRue and Wellman (2009) contended that challenging experiences provide a framework for leaders to try new behaviors or reassess old ways of thinking and acting. Challenging work experiences put leaders in shifting settings where they must solve complex problems and make choices under conditions of risk and uncertainty. Campbell et al. (2010) defined dangerous environments as those in which leaders or their followers confront extremely dynamic and unpredictable situations and where the consequences of leadership may result in grave physical or psychological injury to unit members. Then again, Day, Fleenor, Atwater, Sturm, and McKee (2014) argued that simply correlating a leader's performance with the number of months or years one has been in a position or organization is insufficient in acquiring the full effects of something as nuanced as experience. Day et al. (2014) referenced research by Bettin and Kennedy (1990) in which they assessed U.S. Army Captains according to the knowledge and skills the Captains gained from their current position. When measured, experience was found to be a significant predictor of leadership performance; however, time in service and number of previous positions were unrelated to leadership performance. This evidence suggests that FGOs’ demanding work environment and real-world experience is much more significant to improved performance than merely time in a position.

**Authentic leadership.** The famous line “To thine own self be true,” written by William Shakespeare in the play Hamlet, refers to the concept of authenticity. Leaders who have insight into their basic nature and clearly view themselves and their lives are not hindered by others’
expectations for them, which allows them to make prudent personal choices. Fundamental to our conception of authentic leadership is the notion that authenticity and hence authentic leadership requires heightened levels of self-awareness (Avolio & Gardner, 2005). Such self-awareness occurs when people are aware of their existence, and what makes up that existence within the context within which they function over time. Self-awareness is not a destination point, but rather an emerging process where he or she continually understands his or her unique aptitudes, expertise, principles, core values, and competencies. Avolio and Gardner (2005) suggested that authentic leadership performance involves complex processes and that it is unlikely to be increased simply through a training program. To the contrary, authentic leadership involves ongoing processes whereby leaders and followers gain self-awareness and establish open, transparent, trusting and genuine relationships.

Day and Harrison (2007) proposed the use of identity as a tool to help promote and accelerate both leader and leadership performance. Essentially, thinking of oneself as a leader assists in shaping personal leadership self-efficacy and also encourages a leader to seek out additional developmental opportunities. In an increasing fashion, taking on a leader identity becomes an encouraging force for pursuing opportunities to practice leadership skills as well as pursuing new leadership challenges, which continues to develop individual leader capabilities around leadership. Rather than concentrating exclusively on gaining specific leadership-related knowledge, skills, and abilities, performance efforts should focus on developing strong relationships and interpersonal skills (Day & Harrison, 2007). The relative integration of individual identities with the wider, collective identity influences the ways in which the leader in daily decisions interpretes and employs the organizational mission. In this manner, the various
levels of identity become linked and more fully blended, allowing leaders to consider and employ leadership in different ways.

The kind of leadership that can build confidence comes from leaders who are true to themselves, and whose transparency positively transforms or develops peers and coworkers into leaders themselves. Self-regulation is central to most formulations of authentic leadership (Garner, Luthans, Avolio, May, & Walumbwa, 2005; Sparrowe, 2005). An authentic leader must achieve genuineness, through self-awareness, self-acceptance, and genuine actions and relationships. The “self” in self-awareness is emphasized because other individuals are viewed as potential sources of inauthenticity. Self-awareness is thus an inward journey. Gardner et al. (2005), for example, regarded self-regulation as the process through which the behavior of authentic leaders becomes transparent and persistent with their self-awareness. Similarly, Sparrowe (2005) argued that consistency is the result of self-awareness and self-regulation working in concert–authentic leaders are effective in leading others because followers look for consistency between their leaders’ true selves and their behaviors. Authentic leaders can sometimes be directive or participative, and could even be demanding. The behavioral style by itself is not what necessarily differentiates the authentic from the inauthentic leader. Avolio, Gardner, Walumbwa, Luthans, and May (2004) contended that authentic leaders guide others with deep personal values and beliefs, to develop credibility and gain the respect and trust of followers by encouraging different viewpoints and developing networks of collaborative relationships with followers. Thus, lead in a manner that followers recognize as authentic. As this process influences followers, the followers may also operate in a like fashion revealing to leaders, peers, customers and other interested stakeholders their authenticity, which over time may become a basis for the organization’s culture (Avolio et al., 2004). Authentic leaders that
genuinely desire to serve others through their leadership are generally more interested in empowering the followers they lead, which can have a positive impact on the workplace. Avolio et al. (2004) suggested that leaders who are approachable are more successful in influencing others than the so-called leaders that have coercive or persuasive leadership styles—characteristics associated with traditional transactional leadership theories.

Effective leaders know themselves and stress the positive, which is often labeled positive leadership. Van Wart (2013) emphasized that leaders who are authentic stress self-awareness and self-improvement and leaders who are positive stress openness, transparency, and optimism. Authentic leaders are self-aware regarding their values, cognitions, and emotions (Van Wart, 2013). The core values of authentic leaders include the basic integrity, and they are adept at adapting their emotional intelligence and self-improvement goals by regulating themselves to fulfill ideal ends. Authentic leaders control their emotions and defensiveness, thereby encouraging transparency, feedback, and effective communication. Their self-awareness increases the openness in their communication to others and is likely to encourage openness from others (Van Wart, 2013). Authentic leaders develop credibility capital with their peers and coworkers, whose self-awareness is also boosted and whose authentic interaction becomes more likely.

**Transformational leadership.** Organizational leadership largely underpins the attitudes and commitment of employees. It is widely recognized by other researchers that leadership is an important component of worker motivation through a quality culture. Leadership enhances a quality culture by establishing quality goals for the organization and creates a compelling vision that guides activities towards achieving the quality goals. A positive consequence of effective leadership styles is purposeful changes in quality culture, resulting in improved workers’
attitudes and commitment towards their position (Yee, Lee, Yeung, & Cheng, 2013).

Transformational and transactional leadership are unique styles that cultivate various conditions that are necessary to foster employee motivational attitudes and commitment. Hence, different leadership styles generate various means for influencing workers’ attitudes. For example, Yee et al. (2013) found that transformational leadership has a direct effect on employee commitment; however, transactional leadership has an indirect impact on commitment via leader–worker relationships. Since researchers have concentrated heavily on one particular leadership style, such as transformational leadership, Yee et al. (2013) believed there is a need to research the correlations between different leadership styles in general. Thus, transformational leadership and transactional leadership should be examined to evaluate worker attitudes and commitment, which consequently would affect operational performance.

Good-to-great transformations in organizations do not happen without Level 5 leaders in charge. Level 5 refers to the highest level in a hierarchy of leader capabilities that Collins (2001) identified during his research. Leaders operating at the other four levels in the hierarchy can generate high degrees of success but not enough to promote organizations from mediocrity to sustained excellence. His research identified an interesting pattern in the executive leaders at other comparison companies—they often blamed their situations on bad luck, grumbling about the difficulties of the environment their organization faced. Regardless if luck is involved, Level 5 leaders take ownership for the outcome and use failures to encourage innovation and process improvement. The emphasis on luck turns out to be part of a broader pattern that is referred to as "the window and the mirror" (Collins, 2001, p. 144). As characteristically humble, Level 5 leaders, look out the window to assign credit, even undue credit, to factors outside themselves. Even if the outcome is negative, they look in the mirror to admit responsibility, never
complaining about bad luck or external factors. The Level 4 leaders routinely looked out the window for circumstances to blame but admired themselves in the mirror by taking credit when the outcome was positive. Level 4 leaders often fail to set up the organization for enduring success—what better way to validate one’s personal greatness than that the organization falls apart after one departs (Collins, 2001). These leaders are not concerned with succession planning since seeking credit for the organization’s success is paramount, or at least a primary goal. No organization can protect itself against key talent departures. This search can pose significant operational and financial risk if the organization has not invested in building its future leadership pipeline internally (Gandossy & Verma, 2006). Most companies understand the advantage of having a quality and well-implemented system for passing the leadership baton. Nonetheless, they are unwilling to plan for unpleasant situations, such as an incumbent’s exit, and often postpone the process for the future. By leading by example, senior leaders can play an active role in the succession management process through pushing and promoting it as a strategic goal (Gandossy & Verma, 2006). Moreover, senior leaders should hold managers accountable for recognizing and developing talent in their organization by linking it to appraisals or even promotion.

**Officer development.** Studies have shown developmental methods help military leaders acquire specific military leadership skills. For example, Mumford, Marks, Connelly, Zaccaro, and Reiter-Palmon (2000) and Mumford, Zaccaro, Johnson, Diana, Gilbert, and Threlfall (2000) gathered U.S. military backgrounds to assess the skills officers attained over the course of their career and how to attain these skills. The researchers then assessed complex problem-solving skills, critical thinking skills, emotional judgment skills, solution formation techniques, and leader insight (Day et al., 2014). When comparing these skills from CGOs to FGOs, Mumford et
al. (2000a) described that scores on examinations of these skills increased from junior-level (CGOs) positions to higher-level (FGOs) positions. What is more, they learned that specific expertise was more important at certain stages of an officer’s career. Particularly, they discovered job specialty training was positively correlated to skill increases progressing from junior to mid-level positions while advanced leadership training was positively correlated to increases in essential complex problem-solving skills as officers moved from mid-level to more senior positions. Contrast this with the asymmetric battlefield, which requires officers to face situations that are unlike any they have encountered in training. Hence, military leaders must rely on critical thinking and reasoning skills to assist them in developing the best course of action while in combat. Critical reasoning involves deciding what to consider and think beyond comparable experiences, resulting in leaders moving toward a sustainable and superior course of action (Mensch & Rahschulte, 2008). The life or death challenges confronted in combat environments are complicated by time constraints and uncertainty not often found in other settings. In their research, Mensch and Rahschulte (2008) found the need to incorporate more critical thinking development in officer development. Several Reserve Officers Training Corps (ROTC) cadets in the research, recognized the need for more robust critical thinking development during their training. Likewise, utilizing a 2011 Developmental Team survey, Newcomer, Kolberg, and Corey (2014) found that many FGOs did not understand the value of the U.S. Air Force’s Developmental Team program. The Developmental Team program is a program to train and educate the U.S. Air Force’s active duty, reserve, and civilian personnel through a focused, continual process of personal and professional development (Newcomer et al., 2014). The relative ignorance of these upper-level leaders to the program underscores the
need to make adjustments and fill gaps in the program where and when necessary to produce more competent FGOs.

When examining the domain of military leadership development, it appears to be a fairly straightforward exercise. Taken together, leadership and the military are somewhat inseparable. Numerous studies have investigated leader tendencies and abilities at the organizational level regarding the individual skills of organizational leaders (Wong, Bliese, & McGurk, 2003). In these studies, researchers suggest that organizations attract, employ and retain individuals with analogous characteristics such as character, beliefs, and behavior. Since the US military employs an internal promotion approach, leaders grow from within—lateral transfers from outside the military are not possible. Therefore, one would expect harmony is a common theme among military leaders when it comes to leadership development. Wong et al. (2003) discovered that senior leaders had very similar behavioral preferences and that leaders with concrete preferences were more common than those with a feeling preference. In the future, as units’ transition to more agile constructs, this new structure will require leaders with different capabilities and contemporary military thinking. Transitioning from the traditional static command to command and control on the move will necessitate innovative and resourceful leaders—particularly at the unit level where they will be operating much more independently than in the past. Wong et al. (2003) pointed out that only leaders within the military can create a culture of innovation and creativity. The military leader’s outlook and values must also include a servant perspective when developing younger officers.

**Servant Leadership**

Businesses are increasingly adopting servant leadership as part of their organizational philosophy establishing it as the underpinning for their corporate mission statement. Leadership
can be a very worthwhile approach for motivating others towards the achievement of organizational goals. A small number of authors have a Christ-centered outlook on servant leadership, whereas other authors regard servant leadership from a more secular viewpoint similar to Robert Greenleaf (1970). Greenleaf (1970) presented a foundational statement on servant leadership, “The servant-leader is servant first… It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead” (p. 6). Based on Greenleaf’s writings, Spears (1996) offered four areas of servant leadership. He portrays the four areas as increased service to other individuals or groups, inclusive approach to work, supporting a sense of community, and the allocation of power in decision making (Spears, 1996). Boone and Makhani (2012) proposed five key attitudes that leaders should adopt to become an effective servant leader. Greenleaf's writings then support each attitude. Similarly, Spears (2004) proposed a set of characteristics central to the development of servant leaders. Spears (2004) explained ten features that have been pulled from Greenleaf’s original writings—“listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, developing people, and building community” (p. 8). In addition, Van Dierendonck (2011) described six key characteristics from Greenleaf’s writings. He contended that the characteristics give an accurate summary of servant leadership conduct as experienced by employees of an organization. Van Dierendonck (2011) posited that servant-leaders inspire and develop people; they demonstrate humility, authenticity, acceptance, and offer direction for the good of the whole. Numerous attitudes and characteristics, such as developing community, listening, and dedication to the growth of individuals, share a mutual theme between Van Dierendonck’s (2011), Boone and Makhani’s (2012), Spears’ (2004), and Spears’ (1996)
writings. Greenleaf believed servant leadership is in synchronization with business owing to his considerable experience in business leadership.

**Servant leadership in business.** Chen, Zhou, and Zhu (2015) applied a cross-level process model to describe how a leader’s servant leadership influences frontline employees’ service performance, service quality, and customer-focused behavior. Liden, Wayne, Liao, and Meuser (2014) tested a model that asserted servant leaders trigger servant leadership behaviors between followers and the serving culture was positively associated both to business performance and individual job performance, innovation, and customer service behaviors. Rivkin, Diestel, and Schmidt (2014) stressed servant leadership is positively associated with individuals’ health because servant leaders impact employees’ needs and establish work environments that achieve these requirements. Schwepker and Schultz (2015) explained how servant leadership influences salespeople’s value augmenting behavior performance, along with their sales performance outcome. Jaramilloa, Bandeb, and Varelac (2015) indicated that servant leadership behaviors from supervision influenced salesperson performance via a method that included servant leadership perceptions from the salesperson and the ethical work environment. Thus, servant leadership in business should begin with a theoretical framework.

Van Dierendonck and Patterson (2015) suggested that a leader’s predisposition for compassionate love will foster a moral attitude regarding self-sacrifice, humility, forgiveness, and gratitude. Liden et al. (2015) emphasized similar virtues and argued the importance of leaders focusing on the support and growth of individuals through setting an example of honesty, hard work, and compassion. Whisnant and Khasawneh (2014) asserted trust fosters individual development and a serving relationship with the worker, and that the leader must build a relationship with the worker where there is a belief there is a knowledge exchange system taking
place. A biblical framework was previously in place by Jesus Christ’s example prior to Greenleaf creating theories on servant leadership.

**Christ leadership.** In the secular world, the top-down model of leadership is the framework numerous corporate leaders adopt, so Christian organizations often adapt this framework. However, the true servant leadership model is the reverse of that; it places people as the first consideration in decision-making rather than the personal interests of the leader. Past writers have presented characters and stories in the Bible as a template to define servant leadership and to identify how biblical beliefs are lived out in the sphere of Christian education (Coulter, 2004). In the same way, Coulter (2004) employed biblical templates to establish basic principles of servant leadership. In their book, Blanchard and Hodges (2003) concentrated on the example of the “perfect leadership role model,” Jesus, and servant leadership is separated into four domains: Heart, Head, Hands, and Habits. Heart and Head deal with the internal aspects of leadership, while Hands and Habits deal with the external factors of leadership (Blanchard & Hodges, 2003). All four domains are explained in greater detail in Blanchard and Hodges’ (2008) follow-up book expounding on the meaning of servant leadership modeled after Jesus Christ.

If one wants the lead like Jesus, then one should apply the four leadership domains. By applying the four domains: heart, head, hands, and habits, Blanchard and Hodges (2008) believed servant leaders would be able to radically transform their leadership. How servant leaders view their role, and the servant leader’s belief system, represents a servant leader’s head. The “head” domain assesses our theories and beliefs about motivating and leading those around us (Blanchard & Hodges, 2008, p. 32). Blanchard and Hodges (2008) included the head domain as one of four domains of leading like Jesus. One of the main ideas in servant leadership is
serving others; however, how does one serve others like Jesus, if one does not understand God’s mind? The Bible tells us that, “For who has known the mind of the Lord that he may instruct him? But we have the mind of Christ” (1 Corinthians 2:16, NIV). One can understand how servant leadership will work by having a biblical covenantal perspective. These domains reach into a person’s personal life as well as their education and work-related duties. From how a person thinks and acts to the reasons a person does whatever it is they do, the domains of heart, head, hands and habits outline the fact that being a servant leader should be a way of life, not just a tactic or strategy that increases productivity at work. Christians can radically transform their leadership habits by working on their EGO; this can be done by “Exalting God Only,” instead of, “Edging God Out” (Blanchard & Hodges, 2003). Blanchard and Hodges (2003) advocate the virtues of humility and confidence in a servant leader instead of fear and pride. Proverbs 16:18 (NKJV) aptly states, “Pride goes before destruction and a haughty spirit before a fall.”

**Relationships.** There are a plethora of best practices organizations can employ in the area of servant leadership. A department manager spending the time to form quality relationships with department employees is a best practice (Jaramilloa et al., 2015). For example, leaders should be intentional in their genuine pursuit to get to know their employees’ personal lives. This practice establishes a sense of caring from the leader; that the manager has the employees’ best interest at heart. Employees normally believe that organizational leaders are role models who provide them with examples that are both acceptable and unacceptable actions (Jaramilloa et al., 2015). Since servant leaders typically embrace and live by high ethical standards, they should also play a major role in introducing and maintaining an ethical work climate. The positive results of leaders’ best practices should spur employees in their pursuit of personal ethical standards. Another best practice is a sales manager providing his or her salespeople with
guidance on ways to improve their selling skills and abilities (Jaramilloa et al., 2015).
Leadership sometimes involves finesse. Leaders who take the time to guide their employees on
the specifics of the product or service, enable success in their employees. Training employees to
present the product in a way that explains how the product is beneficial to the customer is
another aspect of leaders’ investment in their employees.

Neubert, Hunter, and Tolentino’s (2016) research results indicated that direct
relationships exist between servant leadership and employee collaboration, creativity, and job
satisfaction. Subsequently, worker job satisfaction associates with customer satisfaction in the
form of improved customer service. Furthermore, the connection between servant leadership and
creativity, coupled with customer satisfaction, are mediated through job satisfaction and
moderated by organizational structure (Neubert et al., 2016). Conditions of high levels of
organizational structure strengthen these associations. However, although elevated levels of
structure reinforce the relationships of servant leadership with both employee job satisfaction and
creativity, the effects differ by outcome. For instance, high degrees of structure combined with
high levels of servant leadership produced the highest level of satisfaction, while the lowest
degrees of satisfaction resulted from combining high levels of structure with low degrees of
servant leadership or low degrees of structure with high levels of servant leadership (Neubert et
al., 2016). In comparison, high levels of structure consistently related to lower degrees of
creative behavior—an overall effect that is buffered slightly with elevated levels of servant
leadership.

Schneider and George’s (2011) research showed while transformational leadership and
servant leadership have associated constructs, servant leadership may be uniquely suited to the
leadership challenges of volunteer organizations. For instance, in their research, it appears
volunteers who worked with servant leaders did feel more empowered within their organization. Comparatively, transformational leadership did not meaningfully predict commitment; therefore, in Schneider and George’s (2011) research, empowerment was not a mediator of the connection between transformational leadership and commitment. These results are significant because earlier studies found a positive relationship between transformational leadership and commitment. Their research recognized empowerment as a mechanism that leaders may be able to leverage to effectively manage the volunteer workforce. According to Schneider and George’s (2011) findings, servant leaders may find it practical to provide empowering experiences to encourage volunteers to successfully perform volunteer service activities. Accordingly, leaders who offer volunteers with positive, meaningful experiences may be able to maintain their interest in their volunteer positions.

Fry (2003) argued the foundation for servant leadership involves helping peers discover their inner character, earning and maintaining peers’ trust, service over self, and reflective listening. Thus, the best leadership comes not from those who seek leadership roles, but instead by those with a positive vision and a desire to serve others first. The core beliefs and attitudes that support the human need for membership, which is to be understood and appreciated, is bestowed through the practice of encouraging the heart (Fry, 2003). The practice of encouraging the heart is not about inauthentic backslapping. Rather, leadership should view encouragement as crucial to supporting coworkers’ commitment to the organization and worthwhile outcomes. Encouragement consists of the meaningful struggle it takes to get extraordinary things done in organizations. Servant leadership is also about pursuing ways to enhance one’s own ability with recognizing and celebrating the achievement of others through valuable feedback.
Feedback Orientation

**Feedback seeking behavior.** Past goal orientation models of feedback-seeking behavior are dependent on the perception that goal orientations impact how leaders cognitively interpret the value and cost of feedback seeking. Theoretically, the relationship between performance goal orientation and feedback seeking behavior is harder to predict. Anseel, Beatty, Shen, Lievens, and Sackett (2015) posited that performance goal-oriented leaders are focused on achieving and demonstrating superior competence relative to their peers. Essentially, they are highly motivated in conveying a positive image to others. When leaders anticipate positive feedback, some performance goal-oriented leaders often seek feedback in public in an attempt to impress their peers. Moreover, some scholars have contended that a performance goal orientation may lead to favorable attitudes toward feedback since feedback may be the catalyst for enhancing performance and therefore outperforming others over time (Kaplan & Maehr, 2007; Anseel et al., 2015). Consequently, actively seeking out performance feedback might also be a desirable option for those with high-performance goal orientation. In comparison, a performance goal orientation refers to the aspiration to prove one’s competence relative to that of others by seeking out favorable judgments and avoiding negative judgments about one’s competence (Crommelinck & Anseel, 2013; Anseel et al., 2015). Leaders focused on performance goal orientation are typically preoccupied with the opinions of others. They want to avoid failure, especially in the presence of others. Feedback may indicate to these leaders that they did not achieve their performance standards, an outcome they will try to avoid or react negatively. Hence, the potential costs of seeking feedback, especially if the outcome is uncertain and possible negative feedback in public is looming, will deter these leaders from seeking feedback. Since there is a bit of evidence that performance goal orientation associates with
anxiety, which could deter leaders from seeking feedback, one could postulate that the cost of seeking feedback will outweigh some of the benefits leading to less feedback-seeking behavior. However, Crommelinck and Anseel (2013) discovered that leaders who are more assured about a specific self-image often take more action to confirm this self-image. Therefore, it is possible that leaders undergoing high levels of certainty seek more feedback for self-verification, and that leaders who are uncertain about a specific self-image will seek less feedback.

Numerous researchers have provided evidence that proactive feedback seeking—the attempts made by individuals to lessen uncertainty surrounding the acceptability of their performance—is both an essential personal and organizational resource. This type of feedback seeking has exhibited clear benefits for both the individual and the organization, such as job satisfaction, learning, and enthusiasm. Feedback produces various desirable outcomes for individuals, such as information about specific job tasks that should facilitate enhanced performance. Indeed, Whitaker, Dahling, and Levy (2007) stated that one of the more principal reasons for employees to pursue feedback was the instrumental motive, which encourages individuals’ feedback-seeking behavior based on the perceived informational value of feedback. When one has this perspective, feedback aids in behavioral self-regulation, and feedback seeking should result in enhanced performance long term. Whitaker et al. (2007) found that perceptions of a positive leader and subordinate feedback environment both led to increased feedback-seeking behavior, and perceptions of increased effort costs moderated the relationship between the peer feedback environment and feedback seeking. Role clarity was also found to mediate the relationship between feedback-seeking behaviors and job performance. According to Whitaker et al. (2007), there was a strong, unanticipated relationship between the leader feedback environment and role clarity, which proposes that an open, supportive feedback policy on the
part of leadership can lead to increased subordinate role clarity independent of ongoing feedback seeking on the part of the subordinate. Although unanticipated, this finding is interesting because it proposes that approachable, supportive leaders may serve as relevant reminders to the organization that subordinates can become self-aware.

McCarthy and Garavan (2007) described acceptance as the predisposition to receive unbiased feedback data or to embrace multi-rater feedback data based on reliability. McCarthy and Garavan (2007) highlighted the nature of acceptance by describing that acceptance involves receptivity on the part of the feedback recipient as well as the aim to alter leadership behavior based on valid feedback. They also posited that both individual differences and viewpoints of fairness shapes leader feedback receptivity. McCarthy and Garavan (2007) suggested the concept of individual personality has relevance in describing responses to feedback. This assumption infers that based on the leader’s personality, locus of control theoretically elucidates the leader’s feedback acceptance. Locus of control is defined as the extent to which individuals believe they have control over the outcome (McCarthy & Garavan, 2007). Change theory in research suggests that attitudes about change may affect acceptance; therefore, cynicism would likely impact responses to feedback.

**Candid feedback.** Failure avoidance-oriented leaders are liable to cease pursuing success or give up and may enter a state of learned helplessness when subjected to uncontrollable or overwhelming environments through a succession of failures. When these types of leaders receive failure feedback, they direct their attention to potential losses or shortfalls they must avoid. If failure feedback is presented most effectually, it can rescue them and enhance their critical thinking by guiding their interpretations and actions, establishing confidence, and identifying failures as learning experiences. He, Yao, Wang, and Caughron (2016) proposed that
goal orientations could moderate the association between how those in a superordinate position handle delivering failure feedback and leader creativity. Focusing on goal orientation, He et al. (2016) investigated learning goal orientations as part of the sense-making process and determined that failure feedback affects creativity. Because sense-making is ongoing and reoccurring, leaders often simultaneously shape and react to the failure feedback they receive. In essence, learning goal orientation strengthened failure feedback’s positive association with creativity, but avoidance goal orientation attenuated the relationship.

Although feedback interventions have been shown to improve leadership behavior, it does not always produce positive outcomes. Previous studies on feedback have recognized that feedback interventions were responsible for improved performance on average; however, many studies failed to find behavior change after the interventions. Curiously, feedback interventions decreased performance effectiveness in over one-third of the cases. King, Schrodt, and Weisel (2009) examined feedback intervention theory as a method of identifying elements inherent in feedback interventions tending to be linked with improvement. While negative behavior was predicted to some extent based on the environment and contexts, the influence of personality factors on the interpretation of feedback was clearly validated (King et al., 2009). Factors such as confidence and self-efficacy have been shown to influence one’s insight and assessment of feedback interventions. For instance, past research has focused on the sensitivity of learners to corrective feedback, or their willingness to apply negative attributions concerning corrective feedback. For some leaders, instructional feedback can feel threatening, can invoke harmful self-attribution, and can result in either an absence of improvement or regression toward negative behavior. In truth, the key to employing leadership tools such as tact, praise, and blunt language is the gleaning of some insight into leaders’ individual perceptions of candid feedback (King et
Kluger and DeNisi (1996) explained that several feedback intervention researchers established that feedback interventions have highly variable effects on performance. Their research recognized that in some environments feedback interventions improved performance, in other environments feedback interventions had no obvious effects on performance, and in yet others feedback interventions the performance regressed. Additionally, verbal feedback intervention that involved the suspected credibility of another person was related to lower feedback intervention influence, while computerized feedback intervention such as email, that focused attention on the task was marginally related to higher feedback intervention influence (Kluger & DeNisi, 1996). Not surprisingly, feedback intervention that threatened self-esteem had lower feedback intervention influence, and feedback interventions that delivered the correct solution were related to stronger feedback intervention influence.

Cynicism is a leader variable that potentially influences the acceptance of honest feedback. McCarthy and Garavan (2007) defined cynicism as a negative perception of the organization, such as distrust in the organization and a perception that major issues exist in their work environment. Their research offered that leaders with a positive perception of the organization will enhance their leadership performance as a result of forthright feedback. Their evidence proposed that employing change programs undergo problems of employee cynicism. McCarthy and Garavan (2007) pointed out that employees who were more cynical about the organization were not as devoted to implementing multi-source feedback to make leadership behavior changes. They ascertained that upward feedback interventions had less impact on individuals that were more cynical about their work environment. Change receptivity normally includes welcoming various responses to change, varying from positive to negative. It is commonly deemed an indication of how eager an individual, group or organization is to change;
which in this case is behavior (McCarthy & Garavan, 2007). Accordingly, this theory includes numerous reactions such as frustration, uncertainty, passive acceptance and change disdain and can be recognized as different attitudes to change (Frahm & Brown, 2007).

**Feedback receptivity.** Feedback orientation is a fresh theory that has possibility in aiding how and whether feedback is successfully utilized. Braddy, Sturm, Atwater, Smither, and Fleenor (2013) emphasized there are associations between feedback orientation and the level to which leaders accept leadership behavior direction and executive coaching. Regarding personal differences, Braddy et al. (2013) alleged feedback orientation correlates positively with two theories: achievement motivation and implicit person theory. Implicit Person Theory is the thought that people possess or do not possess the capacity to change. When addressing how leaders receive and process feedback, Braddy et al. (2013) also examined the association between leader’s feedback orientation and their response to 360-degree feedback along with their coach’s assessments of their attitudes, behavior, and capacity for change, which were annotated during one-on-one feedback sessions. Rating instruments, such as the FOS, can assist in evaluating individual differences that could affect employees’ readiness for and willingness to accept leadership practices analogous to 360-degree feedback. The FOS quantifies feedback-related individual differences in individuals. The authors employed the FOS to establish validity and to discover outcomes, such as feedback receptivity or inclination to change. These instruments can be especially beneficial for leaders and coaches who impart feedback. Further, Braddy et al. (2013) explained feedback intervention impacts critical performance management outcomes, to include self-confidence, self-awareness, and leadership effectiveness. Their research confirms that feedback orientation plays a crucial role in influencing the feedback process as well as shaping positive individual behavior outcomes.
Gabriel et al. (2014) contended when leaders encourage subordinates to request feedback in times of uncertainty, subordinates can develop their sense of meaning by better comprehending personal and organizational goals, fostering perceptions of how responsibilities align with their values and beliefs. The leadership feedback environment embodies one form of social persuasion, such that leaders deliver both favorable and unfavorable feedback to encourage self-improvement and set realistic behavioral expectations. Moreover, to the extent subordinates perceive their leadership as being credible and approachable to ask for and deliver feedback on a day-to-day basis, leaders are more readily available to supply subordinates with direction regarding their responsibilities, ultimately fostering levels of mastery and self-improvement (Gabriel et al., 2014). When receiving favorable or even unfavorable feedback, a subordinate’s self-efficacy beliefs aids as a critical source of empowerment, since high levels of self-efficacy reflect one’s resilient confidence in one’s abilities to exercise control over challenges to achieve desired goals. Furthermore, to the extent leaders promote an environment that offers subordinates a sense of choice, such as allowing them to pursue feedback when they deem it necessary, subordinates will be more likely to experience the independent state of self-determination and freedom.

**Feedback intervention in the military.** One of the most valuable skills that military leaders possess is the ability to translate—to communicate an accurate perspective. Kane, Kamena, and Lackey (2011) explained that a good military leader becomes a great one by comprehending what their senior leader is requesting and by understanding what his or her directions, actions, and emotions actually mean. Great military leaders enhance clarity and meaning to their senior leaders’ random thoughts and feedback. They understand when to act and when to let proposals develop into more concrete ideas. Sometimes military leaders must
ask for clarification, however, after they comprehend their senior leader’s intent, it is their responsibility to translate thoughts into action by providing direction, communicating to others, and establishing priorities (Kane et al., 2011). There are several feedback translation techniques that can ensure senior leaders remain grounded in reality—holding formal and informal feedback conversations and discussion, organizing the senior leader’s schedule to facilitate an accurate picture of the situation, and occasionally going behind closed doors to articulate the other side of the story (Kane et al., 2011). Giving candid feedback behind closed doors is not a simple endeavor; however, it is necessary and expected of great military leaders. Equally, great military leaders encourage their subordinates to close the door and articulate to them the other side of the story. Great military leaders can take candid feedback in stride, which encourages their units to thrive and prosper.

Most effective military leaders pursue challenging environments and have the propensity to adapt and overcome. They thrive on change, not ritual. In this fluid environment, feedback is critical. When most soldiers, sailors, marines, and airmen are asked if they receive feedback and then asked their perception of leadership, one will find a direct correlation between perceived feedback and perceived leadership. Hornburg (2005) argued that when military personnel believe they receive little feedback, their perception of leadership is low. On the other hand, when they receive effective feedback, in most cases their perception of leadership is very high. Whether formal or informal, feedback is important—officer and enlisted performance reports are just the beginning. For example, feedback involves more than sitting down and providing formal feedback from an evaluation or appraisal. Military leaders can provide feedback to others by simply by walking up, shaking hands, and describing the other’s actions, general perceptions relating to work, and beliefs concerning strengths and weaknesses (Hornburg, 2005).
Communication is a two-way street–military leaders must be receptive to hearing from their subordinates. The advantages are the military leader will receive scores of valuable ideas and different perspectives.

Not long ago, performance appraisals in organizations had consisted primarily of leader evaluations of subordinate performance. Of late, however, numerous organizations have begun to recognize the potential benefits of gathering performance feedback from sources in addition to the leader, such as co-workers and subordinates. Facteau, Facteau, Schoel, Russell, and Poteet (1998) reported that recognizing leaders’ reactions to 360-degree feedback is critical because how leaders react to feedback is a key determinant of whether they will take action to enhance their performance. The relationship between reactions to feedback and leaders’ use of the feedback for development may be particularly relevant in a 360-degree feedback process since, in most organizations, these systems are used exclusively for development (Facteau et al., 1998). With the purpose of helping leaders respond positively to co-worker and subordinate feedback when assessments are less than ideal, organizations should invest a considerable amount of time and effort with leaders prior to receiving feedback to help prepare them for the prospect that the assessment may differ from past feedback. This preparation also helps to build knowledge that will increase the possibility that they will respond positively despite what they may perceive to be negative information (Facteau et al., 1998). Employees who receive negative feedback are in most cases those that have development needs, and those arguably of most concern to the organization. By initiating a developmental 360-degree feedback system, the organization’s main objective is for developing under-performers, rather than recognition of good performance, which may be achieved through more formal reward systems (Bailey & Austin, 2006). Additionally, it may be prudent for organizations to employ external accountability mechanisms
to make certain leaders’ reactions to this feedback do not thwart them from taking action for self-improvement. For instance, organizations may need to create formal procedures for writing leadership development plans based on 360-degree feedback and schedule recurring follow-up sessions between leaders and their immediate supervisors to ensure leaders are acting on these development plans (Bailey & Austin, 2006). It is critical that organizations monitor leaders’ reactions to feedback over time to ascertain if leaders’ initial reactions change over time. Leaders may become more accepting of negative feedback if they have had a chance to think about and discuss their feedback with others.

In the past, individual reports have been the source of feedback regarding how the employee is performing, in addition to what they should start doing, or consider doing differently. With increasing unit responsibilities, many FGOs find it harder to provide this formal feedback, especially concerning the extent to which the military personnel are developing team members and fostering a positive work environment. They sometimes lack the opportunity to observe their staff on the job regularly. As a result, there has been a growing reliance on subordinates to provide their leaders with feedback. Additionally, it seems not all rater sources are given the same emphasis. The predictive value of leaders’ ratings over other sources has previously been found in 360-degree feedback research (Brett & Atwater, 2001). However, it is interesting to note that subordinate ratings were not considered to be significant predictors of effective leadership. This result aligns with the findings of Brett and Atwater (2001) who concluded from their research of perceptions of 360-degree feedback usefulness, that feedback from immediate superordinates did not appear to impact reactions as much as feedback from higher level supervision and peers. Though, this goes against the other literature which has found subordinate ratings to be one of the best predictors of feedback impact and attitudes to the
feedback process (Brett & Atwater, 2001). Even so, this finding supports the customary practice of offering a feedback report to the focal individual that has a breakdown of ratings from each rater source.

In their model of feedback impact, London and Smither (1995) proposed that the extent to which the favorable feedback influences the individual will be determined in part by its credibility. The most prominent factor influencing the credibility of feedback is the extent to which the individual perceives the feedback behaviors to be relevant to their role. In this case, London and Smither (1995) found a positive association between feedback credibility and influence of feedback on self-image, development and subsequent performance. Further, feedback dimensions that rate of low importance indicated that those specific behaviors, skills, or competencies are not essential to individuals’ overall effectiveness in a specific role. When controlling for the initial favorability of assessments, individuals’ subsequent ratings became more favorable when receiving favorable, rather than unfavorable feedback ratings. In fact, receiving unfavorable ratings was linked to smaller increments in ratings over time (London & Smither, 2002; London, 2003). Interestingly, this highlights an important issue previously discussed by critics of 360-degree feedback processes–that receiving negative ratings may not necessarily result in constructive reactions.

**Self-Efficacy’s role.** Self-efficacy has been found to play a vital role in determining behavioral reactions to upward feedback. Heslin and Latham’s (2004) hypothesized that self-efficacy and learning goal orientation moderate the effect of upward feedback on leadership performance. The results of their research suggested that leaders who are high performers and have high self-efficacy will continue to increase their performance by interpreting and implementing feedback effectively, while leaders with low self-efficacy tend to disregard this
information. The leaders’ learning goal orientation correlated significantly with their subsequent performance. Likewise, Brown et al. (2001) postulated that self-efficacy moderates the effectiveness of information seeking from leaders and subordinates regarding role expectations and performance. Their hypothesis was based on social cognitive theory, which states that performance anxiety and off-task thoughts do not sidetrack those with high self-efficacy. Greater task focus allows them to interpret and process feedback more precisely. Equally, individuals with low self-efficacy often question their ability to interpret information accurately—they tend to be distracted by cognitions regarding their perceived shortcomings that in turn consume limited intellectual resources that are needed to interpret information effectively.

VandeWalle, Brown, Cron, and Slocum (1999) explained that learning goal orientation was an individual difference variable that is positively correlated to individual performance, and is mediated by goal setting, planning, and effort; all of which are essential to handle feedback constructively. Also, leaders with a learning goal orientation experienced enhanced performance as a result of perceiving negative feedback as an opportunity to change their behavior, question their norms, pursue additional feedback, generate improvement strategies, and increase performance (Brett & VandeWalle, 1999). These studies suggest that having high self-efficacy and a learning goal orientation enables leaders to focus their attention and effort on self-improvement that allows them to enhance their leadership in response to the feedback they receive.

**Leadership Self-Efficacy**

**Benefits of increased self-efficacy.** Paglis’ (2010) research demonstrated that high self-efficacy leaders attain superior outcomes, both regarding their individual leadership execution and in their aptitude to motivate followers to greater levels of collective efficacy and
performance. Leadership self-efficacy can be developed by providing positive cues such as succession planning. Therefore, the value of developing strong efficacy beliefs in leaders suggest that organizations consider future high-profile leaders early in their careers for upward movement (Paglis, 2010). Superordiantes may then offer these leaders a progression of developmental assignments intended on allowing them the possibility to experience and effectively confront leadership challenges in somewhat low-risk settings. As a result, numerous leaders from this group will amass a history of challenges and emerge successfully—an efficacy-boosting performance surge. Moreover, the placing of mentors with high-potential leaders may be a critical factor in developing their leadership self-efficacy. Likewise, the mentors that are perceived in the organization as influential leaders may function as effective role models for these prospects. Through observation and first-hand experience, prospective leaders can learn effective leadership behaviors and tactics and increase confidence that they can operate in a like manner in the future (Paglis, 2010). Interestingly, previous research proposes that gender matching of superordinate-subordinate constructs can be crucial for the strongest modeling-efficacy results to occur (Barclay, Mellor, Bulger, & Kath, 2007). Along with modeling leadership behavior, by setting goals pertaining to leadership tasks and by encouraging feedback, superiors can positively influence their subordinates’ leadership self-efficacy. Conversely, Barclay et al. (2007) proposed when organizations offer to aid prospective leaders dealing with stress management, and take actions to eliminate any stigma surrounding it, they may assist some otherwise highly competent leaders dodge the efficacy-debilitating results of workplace stress and anxiety.

**Locus of control.** Popper et al. (2004) presented a research which examined the locus of control among leaders and discovered that leaders with an internal locus of control showed more
self-confidence in their ability to influence their environment and were better capable of coping with stressful situations. Leaders with an internal locus of control believe they have the potential to influence events; therefore, the results of their leadership are contingent on their capacity and skills. Equally, those with an external locus of control consider factors outside themselves shape events; thus, the results of their behavior hinges on other people, on chance, or other external factors (Pooper et al., 2004). For instance, when faced with challenging leadership dilemmas or extreme contexts such as in military combat, Wong, Bliese, and McGurk (2003) suggested that personal attributes such as a leader's efficacy allowed leaders to expand their leadership abilities through greater thought-efficacy and their ability to visualize a greater span of successful outcomes.

**Executive coaching.** Bozer et al. (2013) maintained that leaders with strong self-efficacy were more willing to pursue behavior change than leaders who were unsure of their individual abilities. Similarly, a leader with high self-efficacy is more apt to pursue significant leadership behavior change than a leader with low self-efficacy. When a leader has low self-efficacy, the coach’s objective should be to encourage and assist the leader by nurturing self-confidence in the leader. A leader with weak self-confidence is more likely to ignore or resist sensible suggestions imparted by the coach. Bozer et al. (2013) contended that coaches may promote increased self-efficacy in the leader through learning goal orientation and organizational commitment. They suggested that pre-training self-efficacy would point to the leaders’ impetus to learn, and outlined pre-training self-efficacy as the leaders’ belief in the capability to benefit from training. Bozer’s et al. (2013) findings revealed a positive correlation between leader feedback receptivity and progression in job performance as self-reported and as described by the superordinate. Further, as the findings revealed, there was a direct correlation as the greater the leader feedback
receptivity, the higher the growth in self-reported job performance and as described by the superordinate.

Self-efficacy beliefs, in most instances, stem from a cognitive process in which leaders evaluate the task and examine themselves with regards to how well they perceive they can plan and undertake the required actions to complete the particular tasks they encounter (Moen & Allgood, 2009). Moen and Allgood (2009) argued that coaching influences the quality of the cognitive processing connected to performance with the aim of increasing self-efficacy. Thus, if leaders can evaluate the task in a better way, analyze their current personal competence, and form personal behavior reflections about their actions with the goal of understanding future growth and development, the leader can envisage self-efficacy will be positively affected (Moen & Allgood, 2009). Coaching provides leaders an opportunity to contemplate on their experiences—a mental debrief designed to uncover the capability for increased growth and development by examining performance and perceptions. Hence, the coaching process is expected to improve leaders’ aptitude to be realistic and practical in their self-reflection both before and after realizing goals. Subjective judgment and self-evaluation often influence an individuals' perceived experience of task mastery. Moen and Allgood’s (2009) findings proposed that leadership performances reinforces as self-efficacy increases among the leaders taking part in the coaching program. Based on the self-efficacy level from the pre-test, if the leaders' task mastery were already high, then expanding task mastery would be very arduous. The current findings are noteworthy because enhanced cognitive processing could increase self-efficacy, thereby improving the leaders’ performances.

**Transfer of training.** The association between self-efficacy and the performance of multifaceted interpersonal tasks, such as workplace mediation, has been validated numerous
times. Findings from previous empirical research suggested that self-efficacy has a major impact on learning and transfer of training (Baron & Morin, 2010). Basically, a leader with high self-efficacy on a specific task while in training, he or she will learn and transfer lessons more than a leader with low self-efficacy. Baron and Morin (2010) examined utility judgment and organizational commitment from the pertinent self-efficacy variables. The first variable, utility judgment, is described as a leader’s individual assessment of the utility of the training received when the leader arrives back at work. Their research validated that leaders who recognized that the training has valuable utility juxtaposed with their job or their career are likely encouraged to participate in the training than peers whose utility judgment is low. Baron and Morin’s (2010) case study revealed that the greater the experiential nature of the planned training program and the soft nature of the skills to be enhanced could affect the utility judgment of participating leaders, and hence linked with their self-efficacy. The author's findings demonstrated a positive and significant correlation between utility judgment of the professional development program and leadership self-efficacy.

Organizational commitment, the second variable, is described as the level of attachment experienced by a leader concerning the organization where he or she works. Regarding training, Baron and Morin’s (2010) study revealed that the level of organizational commitment is positively correlated with participation in training by new superordinates and the drive to transfer learning. Furthermore, the most significant correlations were detected in the area of affective commitment. When receiving executive coaching, the leader’s level of commitment to the organization could be impacted by their motivation to participate in training that is more personal and hands-on, which warrants changes connected with the growth of relational task mastery and attitudes. Baron and Morin’s (2010) study also indicated the more a leader emotionally links to
his or her organization, the more he or she develops the skills necessary when the organization presents an opportunity. This finding also implied that pre-training affective commitment is an essential factor for transfer in coaching situations.

**Measuring self-efficacy.** Moen and Federici (2012) explained that high self-efficacy links with high cognitive flexibility via the successful application and acceptance of candid feedback, objective outlook, and self-regulation in academic environments. The objective of their study was to create a scale for measuring self-efficacy within the scope of coach-based leadership education. The scale estimates how a leader identifies his or her self-efficacy in various areas that are applicable for coaching-based leadership behavior. In the context of domestic coaching-based leadership, their theory posited that the Coach Competence Scale positively correlates with the Coaching Leadership Self-Efficacy Scale. Moen and Federici’s (2012) Coaching Leadership Self-Efficacy Scale estimated coaching-based leadership self-efficacy in five areas: customer relationships, communication and relationship, work facilitator, goal oriented, and employee relationships. Each dimension was created to include other factors of a leader’s work associated with coaching-based leadership. The Coach Competence Scale estimated five aspects of core competencies that are necessary for skilled coaches—enable learning and results, developing the relationship, communication-influencing skills, communication-attending skills, and coherent responsibilities (Moen & Federici, 2012). The study participants accomplished online self-report questionnaires that measured psychological variables relating to their feelings, thoughts, and performance. Their practical model revealed a medium-to-strong correlation between Coach Competence Scale and Coaching Leadership Self-Efficacy Scale. This result demonstrated the utility of the Coaching Leadership Self-Efficacy Scale. Essentially, coaching-based leadership is founded on the value of developing successful
relationships with colleagues. Thus, trust, respect, and mutual understanding are key in effective coaching-based leadership. Competent communication skills are vital to realizing this outcome. Nevertheless, in coaching-based leadership, the leader can pursue performance environment modifications that can impact the subordinate positively. It is worthwhile to note that the leader-coach relationship encourages overseeing optimum working conditions for the leader-subordinate (Moen & Federici, 2012). This scenario permits the leader-subordinate in witnessing the leader-coach in separate environments and should reveal how the leader-coach exercises his or her power inside and outside the organization.

Over the years, leadership coaching is portrayed as a promising leadership development practice. Ladegard and Gjerde (2014) explored, for example, whether leadership coaching could influence increased leader role-efficacy and leader's trust in subordinates. They found that leaders who increased their leader role-efficacy had confidence in their ability to master tasks in their leadership role and a greater ability to reflect on performance. They also discovered that the leaders who participated in the coaching process increased their leader's trust in subordinates. As an additional benefit, the increase in trust associates with a decrease in the turnover intentions of the leaders' subordinates. Ladegard and Gjerde’s (2014) examination of the coaching activities in their research suggested that leader role efficacy and leaders' trust in subordinates as suitable outcome criteria that link both theory and practice. For example, there is evidence that leader role-efficacy is instrumental to leadership performance and leadership performance ratings. Moreover, leader role-efficacy is a fundamental component of leadership development and aligned with Lester et al.’s (2011) belief that leader role-efficacy is an area that can be effectively developed. Not only is leader role-efficacy critical for leaders across organizations to thrive, but also a leaders’ trust in subordinates is another variable that is crucial for leaders as it
impacts leadership performance and a quality relationship between leader and subordinates. These findings are encouraging, as a leader’s willingness to take risks is based on traits such as the predisposition to trust or to relate to subordinates.

**Developmental-efficacy.** Self-efficacy and self-awareness are central components of leadership growth, with specific application to the roles of leaders. Caldwell and Hayes (2016) posited, for instance, that those in leadership positions possess an array of responsibilities, which enable them to live more rewarding and fruitful lives and be more effective in managing others. By understanding the moral and ethical responsibilities of leadership associated with self-efficacy and self-awareness, leaders will be more successful in building followership, trust, and commitment (Caldwell & Hayes, 2016). Similarly, Hannah and Avolio (2010) suggested that leaders with a high degree of self-awareness should be more capable of integrating new knowledge, skills, and abilities into their deep knowledge and identity core. Their research included self-concept clarity as an ability factor comprising developmental readiness. Self-concept clarity is described by Hannah and Avolio (2010) as the degree to which self-beliefs or perceived personal attributes are clearly and confidently recognized, enduring, and constant. Self-concept clarity should augment developmental readiness by increasing leaders’ ability to make meaning of development through enhancing the capacity to determine how to integrate new knowledge, skills, and abilities with their self-concept. By reflecting on their own strengths, weaknesses, and interests related to new experiences, and by understanding their own goal patterns, leaders can focus efforts on specific areas of leadership development. Regarding reflection, leaders can employ past examples of thinking and emotions that are open, positive, and learning oriented to inspire new learning. Otherwise, they can engage in reflection of undesirable events or actions, which could discourage the pursuit of learning and development.
With greater self-concept clarity, Hannah and Avolio (2010) suggested that leaders can better understand and accelerate their self-development, mitigating negative influences. Another motivational component of developmental readiness is developmental efficacy, which is analogous to learning efficacy. Developmental efficacy represents a leader’s degree of confidence one can develop while successfully employing specific knowledge, skills, and abilities in specific leadership environments. For instance, a leader can maintain a learning goal orientation, yet possess different degrees of efficacy to cultivate public speaking skills compared to personnel management aptitudes (Hannah et al., 2008).

Seibert et al. (2016) explained that development is positively correlated with both leadership and performance effectiveness indirectly through leadership self-efficacy when the leader experienced low levels of on-the-job development. This outcome is consistent with the belief that learning takes place either within the context of a leader’s work role or from a leader’s immediate superordinate, which may nullify the effects of learning through formal methods. Nonetheless, in the absence of these informal learning experiences, participating in formal development programs can positively contribute to leadership enhancement by raising one’s self-efficacy beliefs. The unexpected finding by Seibert et al.’s (2016) that participation in formal development programs correlated positively to leadership enhancement indirectly through leadership self-efficacy when leaders also experienced high degrees of both developmental job challenges and developmental supervision, indicates that a synergistic effect can transpire when high degrees of all three sources of development are experienced together. In other words, formal training may also be valuable when coupled with both job challenges and a developmental superior. Ostensibly, this is because each developmental experience provides unique types of interaction, feedback, or support that augments the learning one gains from the
other two sources of development. For instance, formal training provides practical information and conceptual tools leaders can employ to produce effective behavioral patterns. Nevertheless, developmental job challenges afford the opportunity to exercise these behaviors, and developmental supervision affords encouragement and feedback to reflect upon and learn from those experiences (Seibert et al., 2016). In fact, accurate feedback about the cause and effect relationship while dealing with challenging work assignments enhances the probability of improved leadership behavior and is likely to generate self-efficacy.

Leader developmental efficacy and leadership self-efficacy are two specific categories of self-efficacy that have common elements. Leader developmental readiness elements, such as leader developmental efficacy, regulate engagement and persistence toward effective developmental goals and experiences that are expected to increase leader efficacy (Avolio & Hannah, 2008; Murphy & Johnson, 2016). Leader developmental efficacy is defined as the belief in oneself to constantly develop leadership knowledge, abilities, and skills, which motivates leaders to develop the self-regulatory competencies required to work on difficult assignments and assume responsibility for one’s efficacy. Leader developmental efficacy will also exhibit a positive correlation with the goal orientation of the leader engaged in development. Leaders with both high leader developmental efficacy and an orientation toward leader development would be expected to retain leader development goals, employ max effort toward those goals, and persevere in the face of obstacles (Murphy & Johnson, 2016). When a leader possesses developmental efficacy for a certain competence, it will stimulate a learning goal orientation that motivates their engagement towards greater mastery and thus development.
Learning Goal Orientation

Pursuit of learning. To keep the momentum of motivation to develop their skills and abilities, leaders must not only have a personal interest but also have the confidence that they can change and develop. Some FGOs feel leaders are born, not made, or they themselves are past the point of any significant development. To clarify these beliefs Hannah and Avolio (2010) extracted from literature data on goal orientation, a somewhat stable construct based on one’s implicit theory of the self. Implicit theory of self refers to an individual’s beliefs about which personality characteristics tend to also occur in other people. Leaders’ implicit theories can be more gradual where they see themselves as able to slowly develop, or where they see themselves as static. Essential to leader development, implicit theories then create different motivational patterns. Those that have a gradual view tend to have a learning goal orientation where they pursue diverse experiences, perceive themselves as continual learners, and tend to interpret task feedback as developmental (Hannah & Avolio, 2010). They are more willing to endeavor to learn even when failure is a likely option. Leaders with a static view, in fact, have a performance goal orientation, through which they view themselves as being less able to change, where tasks become an examination of their ability (Hannah & Avolio, 2010). Thus, feedback is applied to self versus task advancement, limiting propensity to engage in challenging developmental events. In the end, Hannah and Avolio’s (2010) research indicates that most leadership skills are made, not born—on average 70% developed and 30% heritable, providing strong support for an incremental view of leader development.

Learning goal orientation is a personal motivational characteristic associated with the pursuit of learning. In most cases, leaders with a learning goal orientation will attempt to expand knowledge with the intent of learning, unlike leaders with a performance goal orientation who
are prone to exhibit their degree of abilities. Hertenstein (2001) determined that leaders with an increased learning goal orientation have enhanced results in training contexts involving declarative knowledge than those with decreased levels of a learning goal orientation. Presumably, learning goal orientation will affect the effort used during training, therefore, influencing training outcomes. Bozer et al. (2013) correlated learning goal orientation with feedback seeking and feedback receptivity in which learning goal orientation strengthens the importance of the leader’s drive and feedback-seeking behavior. Hence, leaders with a strong learning goal orientation are more liable to believe feedback is beneficial information in strengthening task mastery. Bozer et al. (2013) discovered when leaders with a strong level of learning orientation were unproductive, they welcomed increased feedback. Moreover, leaders with high levels of learning goal orientation normally pursue knowledge and skills and sense feedback about skill deficits as an opportunity to develop these personal deficits. In comparison, leaders with a high level of performance goal orientation who perceive performance feedback unconstructively generally have low levels of feedback receptivity.

Although a leader’s learning-goal orientation is deemed one of the traits that originate from a leader, how followers perceive that trait is notable. According to Son and Kim (2016), a leader’s personality traits do not directly impact organizational and group outcomes, but instead, how these traits are perceived by followers influences such outcomes. The thought behind this is personality traits are linked with social exchanges and perceptions; thus, it is appropriate to explore the follower’s perceptions of the leader’s traits to comprehend the influence of the leader fully. Specifically, the perceived learning-goal orientation of feedback sources is a key personal characteristic that strongly associates with the feedback sources’ attitudes and behavior toward feedback. Hence, how the follower receiving feedback perceives learning-goal orientation of
feedback sources might have a powerful impact on the feedback recipients’ reactions to the feedback (Son & Kim, 2016).

**Effort and experience.** Evidence suggests that a strong learning goal orientation can boost leaders’ in-role job performance and motivate them to practice innovative work behavior (Chughtai & Buckley, 2011). In-role job performance refers to those events that associate with leaders’ formal role obligations. Earlier research suggests that learning-oriented leaders put additional effort into their responsibilities, establish challenging goals for themselves and are intentional in planning their work. Chughtai and Buckley (2011) posited that leaders who have a high learning orientation are likely to hold an incremental theory regarding their competence and therefore believe they can strengthen their abilities and talents through hard-work and determination. Moreover, these individuals pursue an adaptive response pattern when they encounter task difficulty or failure. For instance, when confronted with challenging situations, learning-oriented leaders show resilience and accelerate effort. Additionally, VandeWalle (2003) reported that learning orientated individuals are more likely to pursue performance feedback because they consider it as essential to their goal of developing their competence. With a learning goal orientation, there is a conviction that sustained effort leads to success. Effort is perceived as a means for initiating his or her current ability for task accomplishment and as a strategy for developing the additional capabilities needed for future task mastery (VandeWalle, 2003). With a learning goal orientation, military officers will likely view feedback as valuable information regarding how to remedy errors and how to acquire the competencies needed for task mastery.

Numerous researchers and professionals alike agree that on-the-job work experience is one of the most effective ways to cultivate individual leadership skills. Experience is the main
foundation of learning to lead, to the extent that leadership can be learned (McCall, 2004).

DeRue and Wellman (2009) posited that attributes of the leader, primarily the leader’s orientation toward learning, will aid in offsetting the diminishing returns of leadership development by highlighting the value of learning and reframing the perception of failures and errors not as performance problems, rather as feedback and opportunities for learning. Hence, military leaders who possess a strong learning orientation will in most cases endeavor to grasp new ideas and improve their level of competence in a given activity. Furthermore, when faced with challenging situations, leaders with a strong learning orientation view mistakes as feedback and opportunities for learning and, in response, frequently increase their effort toward developing new skills and achieving their mission (DeRue & Wellman, 2009).

**Instrumental value.** Leaders consider the potential value and cost of feedback seeking when deciding whether they should engage in feedback-seeking behavior. Regarding the value, Janssen and Prins’ (2007) research identified instrumental or expectancy value and impression management value in feedback seeking behavior. Instrumental or expectancy value represents the expected usefulness of feedback information for increasing job performance and learning behaviors required to achieve goals, while impression management value refers to employing feedback seeking as a tool for bringing one’s success to the attention of others with knowledge to build favorable impressions (Janssen & Prins, 2007). Regarding their beliefs concerning competence development, leaders with a strong learning goal orientation are likely to focus on seeking information that is useful for improving personal attributes such as knowledge, skills, and abilities, which is the instrumental value of feedback seeking. Particularly, information about shortfalls and deficiencies has high instrumental value because it focuses on where abilities are off track and which measures need to be taken to get them on track again (Janssen &
As such, learning-oriented military leaders are likely to interpret such negative feedback from others as valuable information that may improve self-insight and advance self-betterment. This view is in line with the inclination of learning-oriented leaders to intensify effort when facing setbacks and obstacles in task performance.

Team learning goal orientation. Teams with performance goals and leaders with high trait learning orientation should focus some attention on skill development. According to Porter, Franklin, Swider, and Yu (2016), leaders with high levels of learning orientation guided a climate for learning, provided constructive feedback to their followers, explained comparative levels of performance, and encouraged subordinates to apply newly learned skills on the job. These teams will have increased performance by shifting at some of their focus to learning since they will likely develop greater levels of task knowledge required to meet their performance goals, juxtaposed to teams focused exclusively on performance goals. Leaders who have high-performance orientation can encourage members to concentrate on performance demands and focus effort on achieving high levels of team task performance. For instance, Porter et al. (2016) argued that leaders with high-performance orientation consistently provide feedback to team members, reward members who perform at high levels and encourage their teams to increase their competence. When leaders challenge team members to dedicate some attention to performance, teams are compelled to employ new knowledge by completing tasks rather than acquiring new knowledge just for the sake of knowledge acquisition. Furthermore, leaders with high-performance orientation should deter team efforts to learn additional, potentially unsuccessful task strategies once they have already learned strategies that are sufficiently effective (Porter et al., 2016). Thus, teams with learning goals and leaders with high-performance orientation should concentrate their efforts in such a way that enhances
performance, compared to teams with learning goals and leaders with low-performance orientation who may squander their energies on unnecessary untried activities.

**Mentoring relationships.** Although enhanced individual work performance is an expected outcome of a formal mentoring program, mentoring is typically intended to influence a broad set of subordinate behaviors that benefit the organization. Researchers have suggested that leader creativity, innovative ideas about quality products, and efficient practices or services are critical contributors to organizational effectiveness and sustainability (Liu, Wang, & Wayne, 2015). Liu et al. (2015) posited that subordinate learning goal orientation and impression management behaviors jointly influence subordinate creativity through mentoring using time-lagged multisource data from a formal mentoring program. Likewise, Gong, Huang, and Farh (2009) found that subordinates are not easily discouraged by failures or frustration but, rather, strive to develop them further and learn more from such experiences. Furthermore, because research has validated a positive relationship between learning goal orientation and feedback orientation, individuals with a higher level of learning goal orientation may more proactively initiate interactions with mentors and seek mentoring. These subordinate attributes are beneficial to mentors since it can lead to the development of a more open mentoring relationship and more likely to be successful, which likely benefits the mentor’s career in the long run. Liu et al.’s (2015) research also uncovered that mentors are more satisfied with their relationships with subordinates who are open to feedback and coaching, and therefore more willing to mentor those who have a desire to learn and grow. Thus, mentors are expected to form more favorable impressions of subordinates who possess higher learning goal orientation and impart subordinates with increased mentoring functions.
**Goal motivation.** In their research, Yee et al. (2013) suggested that service employee’s learning goal orientation and performance goal orientation are critical factors that impact service performance. While goal orientation is deemed a personality trait, certain contextual factors may influence goal orientation. For example, as goal orientation is a concept related to individuals’ sources of motivation, service employee’s goal orientation is expected to be linked to how their leadership motivates employees. Hence, Yee et al. (2013) explained their leadership's style could influence a service employee's goal orientation. They identified leaders’ transformational and transactional leadership as central factors that impact service employee’s goal orientation. Additionally, affective organizational commitment is a principal factor that motivates employees to accomplish tasks in service contexts and that it associates to how employees embrace the attitudes and behaviors expected by leadership. This notion implies that affective organizational commitment is a factor that could influence how service employees align their behaviors and attitudes with their leaders’ expectations. Ultimately, an employee’s affective organizational commitment was a mediating factor between leader’s leadership style and service employee’s goal orientation (Yee et al., 2013).

The influence of specific feedback on an employee’s response depends on a fundamental characteristic underlying the feedback process–feedback acceptance. Particularly, even though feedback is highly beneficial, it can be ineffectual if the recipient does not accept it. Because feedback acceptance permits employees to internalize the feedback, it is important to recognize what makes employees more disposed to accept feedback. One of the chief factors that motivate employees to receive feedback is their perception of the source of the feedback. Son and Kim (2016) suggested that when exploring the employee’s perception of the feedback sources, such as their superordinate, learning goal orientation is a significant determinant for evaluating the
credibility of feedback sources, which thereby motivates the employee to receive the feedback. Because feedback from a leader is regarded as more influential than that from peers or subordinates, most researchers focus on leaders as the main sources of feedback. Son and Kim (2016) also noted that perceived feedback quality is a mediator in the association between the receiver’s perception of the learning-goal orientation of a feedback source and source credibility. Also, feedback acceptance mediates the association between source credibility and employee creativity. In fact, the employee’s perception of a learning organization culture is a key condition in the association between their feedback acceptance and creativity.

**Age influence.** Even though a learning goal orientation is often viewed as a relatively stable personality characteristic, to some degree, it is also vulnerable to manipulation and change (Maurer, Weiss, & Barbeite, 2003). By virtue of the time in grade requirements for promotion, FGOs are typically older and more experienced than the majority of military members. When time is perceived as open-ended, leaders will prioritize contributory goals related to the acquisition of job-related information, such as gaining knowledge and pursuing challenges. Conversely, when time is perceived to be limited, they will prioritize emotionally meaningful goals, such as goals connected to feeling states and experiencing emotional satisfaction. Agreeing to this thought, Kooij and Zacher (2016) discovered that leaders who perceived their future time as being limited, prioritized emotionally meaningful goals, such as emotion regulation, while leaders who perceived their futures as open-ended, prioritized contributory or knowledge-related goals. Essentially, age is negatively associated with perceived time remaining at work, which is positively related to learning goal orientation and motivation toward learning and development (Maurer et al., 2003; Kooij & Zacher, 2016). Both authors proposed that age-related factors, such as the number of years expected to be working until retirement
from full-time employment, could explain most of the association between age and individual and attitude toward learning and development. Moreover, they advised that older workers who view retirement approaching quickly, often have a reduced future time perspective, resulting in motivational consequences such as a lower motivation to learn.

**Research Variables**

Based on the literature and past theoretical research, the researcher proposed that feedback orientation correlates with key dependent variables, such as learning goal orientation and self-monitoring. Researchers have established that leadership self-efficacy is positively influenced by learning goal orientation and locus of control. Although there seems to be a gap in literature concerning the association between feedback orientation and leadership self-efficacy, research to date has provided support for a potential correlation between the two variables. Thus, Pearson correlation coefficient and Spearman’s correlation coefficient were utilized to investigate the strength of correlation between the independent variable, feedback orientation, and the dependent variable, leadership self-efficacy. Understanding the relationship between the independent variable to the dependent variable will address the hypotheses designed for this research study.

The independent variable in this study is defined as feedback orientation. Linderbaum and Levy’s (2010) study employed dimensions of feedback orientation as independent variables in predicting various outcomes. This empirically driven approach to examining the dimensions was made to explore the ability of each dimension to account for unique variance in feedback-relevant outcomes. Linderbaum and Levy (2010) ran regression analyses to examine the unique contribution of each feedback orientation dimension in predicting outcomes.
The dependent variable in this study is defined as leadership self-efficacy. Hannah et al. (2012) established that the ability to take on new leadership tasks shapes leaders with a high learning goal orientation, view feedback as constructive, and use feedback to enhance leadership development. Learning goal orientation thus enhances leaders’ proclivity to engage in new tasks and to learn and develop from those tasks, thereby enhancing levels of self-efficacy (Hannah et al., 2012).

**Transition and Summary**

The efficiency and survival of military units are dependent on the selection and development of future military leaders. It is understandable that units of all sizes face major challenges in preparing military leaders that can handle major organizational challenges. With the aim of building effective leaders, military organizations must be willing to invest in developing leadership capabilities at all levels of their organizations. On the whole, the approach to increasing leadership performance should be perceived as part of the fabric of organizations with the goal of gaining the support and attention needed to maximize enhancement. Military leadership development is an ever-evolving process that should not be limited to formal leadership training, performance in developmental job functions, and participation in self-developmental programs (Amagoh, 2009), rather it should also include autonomous challenging work environments. For FGOs to be truly effective, leadership development must include specific higher-level officer training coupled with a demanding work environment.

The literature confirms previous research findings on the positive relationship of servant leadership with constructive behavior and positive attitudes of followers. The unique direct relationships between servant leadership and follower creative behavior and job satisfaction stress the utility of promoting servant leadership in military organizations (Neubert et al., 2016).
In addition, past research has recognized the impact of leadership self-efficacy and feedback orientation on individual performance. As this literature review suggests, encouraging results have been expanded to increased leadership performance. Notably, research reveals that leaders who retain high leadership self-efficacy and high feedback orientation achieve superior outcomes, both regarding their performance and in their capacity to motivate subordinates to higher levels of collective efficacy and performance (Paglis, 2010). Finally, learning goal-oriented leaders tend to view themselves as incremental learners and interpret performance feedback as being developmental and useful for enhancing one’s potential. Hence, learning goal-oriented leaders often achieve mastery when it comes to inspiring and developing others as well as advancing themselves. Military leadership development remains inextricably intertwined with the theories mentioned previously; therefore, researchers will find ample opportunities to further the field of leadership development within the military.

The primary aim of the following section is to detail the project research and design. This includes a discussion of the role of the researcher, participants, population and sampling, data collection, data analysis technique, and reliability and validity. Such analysis of data will provide a conceptual framework for the application of relevant leadership approaches.
Section 2: The Project

The direct relationship between feedback orientation and leadership self-efficacy has received relatively little attention in leadership literature. Nonetheless, the findings in the literature suggest that people with strong leadership self-efficacy beliefs are likely to be more motivated to pursue enhanced performance, and given the influence of the feedback recipient on the feedback process, it is crucial to comprehend how these two personal elements are associated.

The researcher covers the development of the research method and design in this section. Leadership theory is the basis for the entire research since it functions as an organizing model for feedback orientation and leadership self-efficacy research questions, hypotheses, and data collection procedures (Creswell, 2014). Other areas include the researcher’s data collection methods, participant selection, data organization, population and sampling, and data analysis. Lastly, the validity and reliability of the quantitative data close the section.

Purpose Statement

The purpose of this non-experimental quantitative research was to demonstrate if FGO leadership self-efficacy is positively or negatively correlated to FGO feedback orientation. Those officers that have a high feedback orientation will, in most instances, actively seek candid feedback. Lam et al. (2007) posited that feedback seeking by leaders encouraged improved performance, at least in part because such behavior enhanced the quality of the relationship between employees and their immediate supervisors. Moreover, because the core responsibility of FGOs is providing direction and leadership, the type of feedback elicited from feedback oriented FGOs will be leadership in nature. Once valuable feedback is received, FGOs have the opportunity to process the feedback and determine which personal leadership behaviors are
ineffective, and should change, and which leadership behaviors are effective, or should continue. Since effective FGO leadership requires complex social problem-solving skills, FGOs must continually build upon their leadership acumen by testing leadership strategies in different contexts.

This research demonstrated if FGO leadership self-efficacy is positively or negatively correlated to FGO feedback orientation. Leaders that have a high self-efficacy normally picture success scenarios that provide positive guides for behavior, and they mentally rehearse sound solutions to hypothetical issues (Hannah et al., 2012). The positive guides for performance are often the result of feedback. Likewise, because of past constructive feedback, leaders that have high self-efficacy possess a guide that illustrates leadership behavior that should not be employed. The results of the research should provide clarity on the relationship between an FGO’s feedback orientation and leadership self-efficacy. The researcher’s role was pivotal in developing and ensuring accurate results in this research.

**Role of the Researcher**

The researcher’s role consisted of numerous actions laying the groundwork for this research; specifically, survey administration and researcher analysis. The researcher collected data required to perform the quantitative analysis of the information regarding FGOs’ feedback orientation and leadership self-efficacy. This process involved the selection of survey instruments and permission for use from the creators of said instruments. Once the researcher received approval from Liberty University’s Institutional Review Board, the researcher collected hard copies of the survey and questionnaire over the span of a few months from respondents making up diverse backgrounds and positions.
Survey Administration

Physical presence while the survey is administered is a method that can be effective in persuading participants to respond to a survey. For all participants, the researcher briefly explained the purpose of the research, offered survey instructions, and provided a slotted box in which to place the completed survey instrument. The researcher then exited the immediate area to maintain participant anonymity. However, participants were given instructions on where to locate the researcher in the general area should any questions arise. The reason that more participants were willing to complete a survey administered in person is the researcher was present to explain the survey and answer any questions the FGOs have while they complete the survey (Privitera, 2013). This method was more time-consuming since it required the researcher to be in the general area while each FGO completed the survey. The researcher then gathered the survey instruments from respondents for analysis. The researcher developed data by organizing it into background and variable categories. The proximity of the researcher to the participants aided in administering the survey instrument with minimal issues.

Researcher Role in Analysis

The researcher was able to accumulate a sufficient number of hard copies from participants that met the sample requirements; therefore, data collection did not require an electronic means of surveying participants. The researcher collected the survey instruments and collated the data for aggregate analysis upon completion. All scoring from the survey instrument, including the participant background information, Feedback Orientation Scale (FOS) scores, and Leadership Efficacy Questionnaire (LEQ) scores, were imputed and grouped into spreadsheets in preparation for predictive analytics software. Data cleaning was performed to improve the quality of data through correction of detected errors and omissions. This process
involved completeness checks, limit checks, and the review of the data to identify outliers or other errors (Osborne, 2012). The researcher employed the analytics software by testing whether two metric variables are positively correlated in the FGO population. The data analysis techniques of Pearson correlation and Spearman’s rho correlation for outcomes of FGO leadership are consistent with obtaining answers and outcomes of the research question and hypotheses. These data analysis techniques support the underlying theoretical framework and the findings of the research. Prior measurement studies have used straightforward correlations, such as studies aimed at obtaining evidence of variable relationships (Goodwin & Leech, 2006). Further data analysis entailed the measuring of skewness and kurtosis, Q-Q plot, and Shapiro-Wilk test for determination of normal distribution within an acceptable range via normality tests. An examination of participant background information and how it influenced the variables were relevant to this research with the intention of identifying characteristics and factors contributing to similarities and differences between demographics. The researcher translated the results of the data analysis by presenting the findings and applications for leadership development.

**Participants**

A goal of the research was to have confidence in the participants’ survey responses. Leadership effectiveness refers to a leader’s ability to influence his or her subordinates. Therefore, potential survey respondents must first serve in a leadership position. The subsequent evaluation of that leader’s effectiveness should be compared to the performance of other leaders (Judge, Bono, Ilies, & Gerhardt, 2002). The researcher sought the appropriate participant selection and maintained ethical responsibilities regarding the participants.
Participant Selection

The selection of participants was based solely on military members holding the military grade within the FGO range of Major, Lieutenant Colonel, and Colonel. With random selection within each demographic, each FGO had an equal probability of being selected from their demographic, ensuring that the sample was representative of the population (Creswell, 2014). The researcher intentionally visited groups of participants with diverse demographic backgrounds (e.g., gender, line officer, rated officer) to ensure a mix of backgrounds; though, the researcher selected random participants within each demographic. The researcher met with the participants’ unit commanders informing them of the purpose of the research and objectives along with the researcher’s intent to conduct research within their units; each unit commander granted permission. The researcher contacted potential participants of this research via face-to-face, telephone, and email for recruitment purposes only. There was minimal difficulty in recruiting FGOs to participate in the survey.

Ethical Responsibilities

To demonstrate respect for the participants, which is a central principle in the Belmont report, the researcher maintained ethical responsibilities regarding how to handle and administer surveys in the research (Privitera, 2013). The researcher did not attempt to coerce any FGOs into answering questions or completing the survey. The Informed Consent form was presented first in the survey instrument. The consent included a statement the respondent understood the nature of the research, understood there are no known risks to this research, understood that participation was anonymous, the researcher would protect anonymity, and gave permission to serve voluntarily as a participant in the research. Participants were able to opt out of the survey at any time, and there was no adverse action for that decision.
The selection of participants was based solely on military members holding the military grade of FGO, and the researcher made efforts to obtain samples from FGOs holding diverse backgrounds and experiences. It was critical the researcher maintained ethical responsibilities regarding the participants’ anonymity and regarding the lack to pressure to complete the survey. Similar to the selection of participants, one should not underestimate the importance of understanding the research method and design.

Research Method and Design

Quantitative research represents a traditional scientific approach to research that is defined by its logic, objectivity, and prediction (Creswell, 2014). A unique feature of quantitative research is the integration of participant data that is analyzed through specific statistical analysis. Objective researchers are those committed to a quantitative approach dedicated to the discovery and validation of quantifiable information. Therefore, the researcher employed a non-experimental correlational design of research in which data analysis was used to describe and measure the degree or relationship between two or more variables (Creswell, 2014).

Method

Quantitative method. A quantitative approach was employed to explore the correlation between two variables. Quantitative statistical processes are a way of determining if one variable correlates with another variable. Qualitative research was not suitable in relation to the hypotheses as interpretive research related to the FGO’s personal experiences would not offer a large enough sample of the population to understand the relationship between feedback orientation and leadership self-efficacy (Privitera, 2013). Researchers should consider a mixed methods design only when the qualitative or quantitative approach, each in isolation, is insufficient to understand a research problem (Creswell, 2014). In this case, a quantitative
method was sufficient to understand a research problem. The literature review helped substantiate the research problem, and it included numerous examples of quantitative studies in the areas of feedback orientation and leadership self-efficacy. For example, Anseel et al. (2015) introduced quantitative research that provided the groundwork for further advancing the feedback seeking behavior domain, both theoretically and empirically. Popper et al. (2004) presented quantitative research of Israeli Army soldiers identifying the major capacities required for leadership. The major capacities included self-efficacy, proactive orientation, and capabilities needed for prosocial relationships.

**Research Design**

**Survey design.** This survey design provided a quantitative description of attitudes and opinions of a Field Grade Officer (FGO) population by researching a sample of that population. A survey design was the preferred type of data collection procedure for this research since the Feedback Orientation Scale (FOS) and Leader Efficacy Questionnaire (LEQ) allowed the researcher to collect data from a large number of respondents and provide the necessary quantitative data to perform correlational analysis. The survey design was also cross-sectional—a snapshot in time instead of over an extended period (Creswell, 2014).

**Correlational design.** A correlational survey research design was used to determine the extent to which two variables are related, not the extent to which one variable influences another variable. The correlational survey research design consisted of gathering information via surveys and questionnaires by choosing a sample of participants. The researcher also compared the degree of correlation between each FGO demographic. For instance, the researcher compared rated officers’ overall correlation (r) results to non-rated officer’s correlation results,
and the researcher compared line officers’ correlation results to non-line officers’ correlation results.

**Variables.** The two variables in the research are feedback orientation and leadership self-efficacy. The Spearman rank-order correlation coefficient and Pearson correlation coefficient analysis do not take into account whether a variable has been classified as a dependent or independent variable because the analyses do not account for any theory behind why one chose the two variables to compare (Goodwin & Leech, 2006). Nonetheless, in this research, the researcher identified feedback orientation as the independent variable, and leadership self-efficacy as the dependent variable. Proving the correlation between two variables, feedback orientation, and leadership self-efficacy, form the crux of the hypotheses.

This research encompassed a collection of numerical data subjected to statistical analysis. This method is ideal when comparing two or more different variables that can be measured. Because the quantitative research centered on correlational research, the researcher deliberately sought to investigate the association between variables. This method allowed the researcher to understand whether variables tended to move in the same direction; in other words, convergent validity. Before these variables are exploited for data analysis, the researcher must calculate the sample size of the target population.

**Population and Sampling**

Although measuring data from the full population is the most accurate and ideal, it is not always practical. When performing this research, the researcher measured data from a sample of the total population of interest, not from all members of the population. This section discusses the population size, sampling method, sample size, and relevant participant characteristics.
Population

The total population of this research study included all Air Force Field Grade Officers (FGO) stationed at Robins Air Force Base (AFB), Georgia. At the time of this research study, the total population equaled 180 FGOs. The total U.S. Air Force FGO population is 39,295 (“2015 Demographics,” 2015). The total number reflects FGO’s across the Active Duty Force, Air Force Reserve, and Air National Guard. FGOs (Major, Lieutenant Colonel, and Colonel) make up 45% of U.S. Air Force officers and only 8.1% of total Air Force personnel (“2015 Demographics,” 2015). The total population of Air Force Officers at Robins AFB is 377; therefore, the FGO population percentage (47.2%) at Robins AFB is in line with the overall U.S. Air Force percentage. The researcher obtained Robins AFB FGO population data from each unit’s Force Support Squadron located at the base.

Sample

The sampling design for this research population is single-stage. The researcher used a single-stage sampling method as the researcher had access to names in the population and could sample individuals directly (Creswell, 2014). The researcher took a stratified sample for specific demographics. Stratification means that specific demographics of FGOs (gender, rank, years of service) are represented in the sample, and the sample reflects the true proportion in the population of individuals with certain characteristics (Creswell, 2014). The researcher randomly sampled each category or stratum within the population.

The sample size of the target population was established using Cochran’s sample size formula. When using Cochran’s sample size formula for continuous data (Barlett, Kotrlik, & Higgins, 2001), the first step in computing the appropriate sample size is estimating the variance. Next, an alpha score of .05 was used to set the level of risk the researcher was willing to accept.
The z-score (standard score) associated with this level of risk was 1.96, and the acceptable margin of error was 5%. Therefore, from the total FGO population of 180, the recommended sample size is 122. The population sample indicates a 95% confidence level. This population sample size was analogous to other studies that validated the Feedback Orientation Scale and Leader Efficacy Questionnaire (Linderbaum & Levy, 2010; Hannah et al., 2012).

Since it was not feasible to gather data from the entire U.S. Air Force FGO population, the researcher measured data from a sample of the total FGO population at Robins AFB, GA. Based on Cochran’s sample size formula, the recommended sample size for the total U.S. Air Force FGO population (39,295) is 381. The recommended sample size (122) of the target population was determined using Cochran’s sample size formula. According to past research, researchers have completed other correlational studies containing similar population and sample sizes to this research.

**Data Collection**

Data collection involved the employment of survey instruments, which aided in collecting quantitative data. This section discusses the research instrument’s demographic portion (Background), Feedback Orientation Scale (FOS), and Leader Efficacy Questionnaire (LEQ) along with their dimensions. Also, this section covers data collection and data organization techniques.

**Instruments**

This quantitative correlational research employed a survey design with the aim of reducing the knowledge gap between feedback orientation and leadership self-efficacy in military officers. A survey design provides a quantitative or numeric account of trends, thoughts, or views of a population by examining a sample of that population (Creswell, 2014).
The primary goal of utilizing a survey design in this research was to collect quantitative, numeric data related to U.S. Air Force officer demographics and to assess the leader self-efficacy and feedback orientation of the respondents. The demographic portion, FOS, and LEQ make up the framework of the research instrument. Appendix D contains a sample of the survey instrument used in this study.

**Demographic portion.** A distinguishing feature of this research involved the collection of quantitative data that, in turn, can be subjected to statistical analysis. Background data were collected using a structured survey and questionnaire to explore the relationship between gender, rank, line and non-line officers, rated and unrated officers, and length of service. The initial questions in the background are demographic to provide categories for analysis and summary. This data enabled the researcher to differentiate between different sub-groups. Participants did not provide their name on the instrument to maintain confidentiality and anonymity. The requested background information also ensured respondents were eligible to participate.

**Feedback orientation scale.** To meet the aim of this research, participants were invited to respond to Linderbaum and Levy’s (2010) Feedback Orientation Scale (FOS). The FOS comprises a validated 20-item survey that measures feedback orientation. Linderbaum and Levy (2010) granted permission to the researcher for its use in the research. Appendix C includes the accompanying consent emails from Linderbaum and Levy. Motivational and attitudinal theories were used as guides to identify the dimensions of feedback orientation included in the research. These theories are helpful in understanding the individual difference variables that drive behavior. Based on this theory and research by Linderbaum and Levy (2010), the dimensions of the FOS (Figure 2) are utility (Questions 1–5), accountability (Questions 6–10), social awareness (Questions 11–15), and feedback self-efficacy (Questions 16–20).
Utility. Utility is defined as an individual’s tendency to consider feedback as useful in achieving goals or obtaining desired outcomes. While the defensiveness dimension focuses more on individuals’ affective reactions toward feedback, utility captures individuals’ beliefs that feedback can lead to other valued outcomes (Linderbaum & Levy, 2010). The utility dimension is based on the ability of feedback to lead to other valued outcomes such as personal effectiveness. It also captures attitudinal beliefs about feedback, which can affect people’s intentions and behaviors as outlined in the theory of reasoned action (Linderbaum & Levy, 2010). A sample item in the FOS is, “Feedback is critical for improving performance.”
**Accountability.** Accountability represents an individual’s tendency to feel a sense of obligation to react to and follow up on feedback. The theory of accountability suggests that those who feel accountable will behave in ways to increase the likelihood that others will view them in a positive way (Linderbaum & Levy, 2010). Accountability is seen as a necessary precursor to intentions to follow up on feedback. The accountability items contained in the FOS focus on an individual’s sense of responsibility to respond to feedback (Linderbaum & Levy, 2010). An example item in the FOS is, “I hold myself accountable to respond to feedback appropriately.”

**Social awareness.** Social awareness represents an individual’s propensity to use feedback to be mindful of others’ assessments of oneself and to be sensitive to these assessments (Linderbaum & Levy, 2010). While the accountability dimension described previously refers more to internal pressures to respond to feedback, social awareness can be viewed more as external pressure to be aware of and to respond to feedback (Linderbaum & Levy, 2010). Items measuring the social awareness dimension focus on an individual’s belief that feedback can help one become more aware of and sensitive to the opinions of others and that responding to feedback can influence how others perceive him or her (Linderbaum & Levy, 2010). An example item in the FOS is, “Feedback lets me know how I am perceived by others.”

**Feedback self-efficacy.** Feedback self-efficacy is defined as an individual’s perceived competence to interpret and respond to feedback appropriately. As suggested, perceived behavioral control has an important impact on behavior. People are more apt to exhibit particular behaviors if they believe they are able and if they feel they have control over exhibiting the behaviors (Linderbaum & Levy, 2010). The feedback self-efficacy dimension of feedback orientation measures a leader’s self-efficacy as it relates specifically to feedback.
(Linderbaum & Levy, 2010). For the feedback self-efficacy scale, items are tailored to tap a leader’s confidence in dealing with feedback in particular. An example item is, “I believe that I have the ability to deal with feedback effectively.”

**Leader efficacy questionnaire.** The quantitative portion of the research utilized a survey design and a modified instrument established by Hannah and Avolio (2010) to measure leader self-efficacy. The Leader Efficacy Questionnaire (LEQ) is a 22-item instrument has been validated across five diverse populations. Hannah and Avolio (2010) granted permission to the researcher for the LEQ’s use in the research. Appendix B includes the accompanying consent form from Mind Garden. Hannah et al. (2012) completed five studies entailing five separate samples designed to examine the psychometric properties and construct validity of the Leader Self and Means Efficacy measure. The LEQ is grounded on Leader Self and Means Efficacy Theory and is distinct since it denotes a leader’s self-efficacy, and the confidence one has in one’s capabilities to lead (Hannah & Avolio, 2010). Research has demonstrated that means efficacy works along with self-efficacy to independently influence performance–the LEQ encapsulates both (Hannah & Avolio, 2010). Further, the LEQ captures a leader’s belief in the degree that their colleagues and superordinates will encourage their leadership means efficacy.

The 22-item LEQ measures three dimensions of leadership self-efficacy (Figure 3): leader action self-efficacy (Questions 1–7), leader means efficacy (Questions 8–14), and leader self-regulation efficacy (Questions 15–22; Hannah et al., 2012). Leader action efficacy is considered leaders’ perception they can perform leadership and create results. Leader means efficacy reflects leaders’ perception of the utility of the resources and support available for performing (Hannah & Avolio, 2010). Leader self-regulation efficacy involves leaders’ degree of self-efficacy to regulate their thinking and self-motivation. The LEQ instructions asked
participants to respond to the items on a 0–100 scale, reflecting their efficacy strength (expressed as a percentage) in their perceived capability to enact each aspect of leadership specified. Bandura (2006) suggested that the efficacy strength score is the most effective measure of self-efficacy beliefs. A score of 100 represents 100% confidence, whereas a score of 0 means no confidence at all. Moreover, the questionnaire provided respondents with an item stem which read “As a leader I can.” Example self-regulatory LEQ items include, “Energize my followers to achieve their best.”

![Figure 3. Dimensions of Leader Efficacy Questionnaire](image)

Figure 3. Dimensions of leader efficacy questionnaire.

**Data Collection Technique**

The researcher introduced himself to potential participants to explain the purpose of the research. The researcher indicated all surveys were completely anonymous, which eased FGO’s concerns about the researcher’s intent. Once respondents completed the survey, data from the
surveys were assessed for respondent errors, then imputed into spreadsheets and statistical software for analysis.

**Data Organization Technique**

All anonymous raw data completed by the respondents are maintained electronically on a secure server. All surveys will be stored in a secure cabinet for a period of three-years, after that time all documents will be destroyed by shredding. There are no anticipated uses for the data after completion of the dissertation. Only the researcher has access to the research data.

**Data Analysis Technique**

This section provides insight into the data analysis techniques of the research. The researcher compared mean scores from Feedback Orientation Scale (FOS) and Leadership Efficacy Questionnaire (LEQ) results using each mean score as a variable. Through the independent variable, feedback orientation, and the dependent variable, leadership self-efficacy, the researcher performed a correlational analysis and two-tailed significance test. In addition, the researcher compared the extent of correlation between each Field Grade Officer (FGO) demographic. Quantitative analysis software made the correlational analysis possible.

**Mean Score**

The researcher calculated a mean score of 20 items from the FOS, and a mean score of 22 items from the LEQ for each participant. The participants’ mean score from the FOS and the participants’ mean score from the LEQ are separate variables used in the correlational analysis. The mean score method is recommended, specifically when researchers are attempting to measure concepts where a single survey item is unlikely capable of describing the assessed concept (Sullivan & Artino, 2013). Linderbaum and Levy (2010) calculated a mean score for the scale items in their Feedback Orientation Scale study to prove the instrument’s discriminant and
convergent validity. Likewise, Hannah et al. (2012) calculated a mean score for the scale items in their Leadership Self and Means Efficacy study to establish discriminant and convergent validity.

**Correlation Analysis**

The researcher designed this type of analysis to provide a basis for addressing the research question, “Is there a correlation between feedback orientation and leadership self-efficacy in Field Grade Officers?” Once the data were collated, Pearson correlation coefficient and Spearman’s rank correlation coefficient were employed by the researcher since these tests provide accuracy when describing the degree of relationship between two variables and when reporting correlational statistics between scores.

**Spearman’s rank correlation coefficient.** Once one decides to conduct a statistical test between Likert-type variables, it is a good idea to conduct a Spearman rank-order correlation coefficient to determine just how strong that relationship is between those two ordinal variables (Salkind, 2013). This formula is frequently referred to as the Spearman’s rho test in the field of statistics. The Spearman rank correlation coefficient examines the relationship between two variables when both of those variables are ordinal. The variables are ordinal since they have a meaningful order to them (rank), therefore, can be analyzed using nonparametric statistics (Salkind, 2013). Ramchunder and Martins (2014) employed a Spearman’s rho analysis to determine the relationships between emotional intelligence, self-efficacy and leadership effectiveness. Likewise, Buble, Juras, and Matić (2014) utilized a Spearman’s rho to explore the relationship between leadership style and motivation, thereby demonstrating that leadership style influences motivation.
**Pearson correlation coefficient.** In contrast, parametric methods, such as the Pearson correlation coefficient, are extremely flexible and powerful. Pearson correlation coefficient establishes the strength and direction of the linear association between two variables (Salkind, 2013). King et al. (2009) used the Pearson correlation coefficient to examine the unique and combined associations among the four dimensions (feedback utility, feedback sensitivity, feedback confidentiality, feedback retention) of the FOS and their validity measures. Moreover, Schneider and George (2011) tested the expected correlation between perceptions of transformational and servant leadership using the Pearson correlation coefficient. Their research supports the belief that transformational leadership and servant leadership share many similar characteristics and qualities.

The two variables in this research have been measured on an ordinal scale. However, both variables do not need to be measured on identical scales—the FOS variable was ranked 1 to 5, and LEQ variable was ranked 0 to 100. Because the numbers in this research’s survey and questionnaire are reasonably distributed, one can make inferences about their means (Norman, 2010). Norman (2010) confirmed this hypothesis by performing the Pearson correlation and the Spearman correlation on 10 point scale survey results. Both methods produced nearly identical values, even in conditions of abnormal, skewed data.

**Two-Tailed Significance Test**

The researcher chose a two-tailed significance test for hypothesis testing. The most precise form of quantitative research flows from a test of a theory and the formation of research questions or hypotheses that logically flow from the relationship among variables in the theory (Creswell, 2014). To complete a statistical test, the obtained value needs to be compared to the critical value. The critical value is the point extending outside the obtained outcome and is
assessed to be so rare that one concludes the obtained outcome is not due to chance but to some other factor (Salkind, 2015). If the obtained value is not beyond the critical value, the null hypothesis is the most attractive explanation (Salkind, 2015).

**Quantitative Analysis Software**

Data were analyzed using the IBM software package SPSS Statistics version 24. SPSS is the acronym of Statistical Package for the Social Science and is a statistical package which can perform highly complex data manipulation and analysis. When employing SPSS, the procedure for the two-tailed test is the same as for the one-tailed test. SPSS is widely used in quantitative research concerning the correlation of variable data originating from survey scales; thus, the researcher performed Pearson and Spearman correlation calculations via SPSS.

The researcher analyzed mean scores from the FOS and LEQ using each mean score as a variable, and a correlational analysis and two-tailed significance test were performed utilizing the two variables. The researcher chose a non-experimental correlational design of research in which data analysis consisted of the nonparametric measure, Spearman's rank correlation coefficient, and the parametric measure, Pearson coefficient correlation. Previous correlational research in the areas of feedback orientation and leadership self-efficacy confirm these two parametric and nonparametric measures are appropriate. The researcher also compared the extent of correlation between each FGO demographic. Quantitative analysis software allowed the researcher to complete a correlational analysis. Researchers often employ quantitative analysis software in the methodical process of proving reliability and validity of their research instruments.
Reliability and Validity

It is essential that reliable and validated outcome measures be used to achieve meaningful results. Reliability is the proportion of variability in a measured score that is due to variability in the actual score rather than some type of error (Roberts, Priest, & Traynor, 2006). Validity describes the extent to which a measure accurately represents the concept it claims to measure (Roberts et al., 2006). This section discusses the reliability and validity of the Feedback Orientation (FOS) and Leader Efficacy Questionnaire (LEQ) survey instruments.

Reliability

Research methods resulting in the production of numerical data of relevance to FGO’s feedback orientation and leadership self-efficacy includes a survey and questionnaire. These research instruments should provide the same information if used by different people, or if it is used at different times.

FOS reliability. Linderbaum and Levy (2010) performed two pilot studies and two focal studies that provided substantial support for the reliability and validity of the four dimensions of feedback orientation. Alphas for each dimension in the Feedback Orientation Scale (FOS) were above the typical .70 cutoff. Utility had an alpha of .86. Accountability had an alpha of .74. Social awareness had an alpha of .80. Self-efficacy had an alpha of .77. The overall alpha was .86. Test–retest reliability was also examined. Utility had a test–retest reliability of .60. Accountability had a test–retest reliability of .54. Social awareness had a test–retest reliability of .54. Self-efficacy had a test–retest reliability of .60. The overall test–retest was .69. No significant effects for the length of time on test–retest reliability were found.

LEQ reliability. Hannah et al. (2012) tested the Leader Efficacy Questionnaire (LEQ) utilizing two unique samples across all requirements for establishing construct reliability. Thus,
the LEQ offers a reliable measure to guide future leader efficacy research. The researcher examined two sample studies for internal consistency reliability among four separate variables. In the first sample, the alpha for the LEQ was .93. Core self-evaluations had an alpha of .77. State hope had an alpha of .82. Leader self-efficacy had an alpha of .87. The internal consistency reliabilities for the second sample’s variables were: Leadership Self and Means Efficacy .94, Self-esteem .88, Leader self-efficacy .94, and General self-efficacy .88.

**Study reliability.** Creswell (2014) defined reliability in terms of an instrument demonstrating internal consistency on item responses, consistency in test-retest correlations, and consistency in repeated administrations. By using the data gathering and data analysis techniques presented previously, any researcher would be able to replicate this project either inside the military or outside the military and obtain similar results. Each hypothesis was testable, using the FOS and LEQ as the basis for data collection. Based on previous research (Linderbaum & Levy, 2010; Hannah et al., 2012) these hypotheses were able to be answered by analysis of the data.

**Validity**

Research validity in surveys relates to the degree to which the survey instrument measures the correct components that need to be measured. Validity is a way demonstrating and communicating the rigor of research processes and the trustworthiness of research findings (Roberts et al., 2006; Creswell, 2014). The convergent and discriminant validity of the LEQ and FOS confirms these two instruments are suitable for this correlational research.

**LEQ validity.** The LEQ is based on Leader Self and Means Efficacy Theory and is unique because it captures both leaders' self-efficacy, and the confidence leaders have in their subordinates' ability to lead. Hannah et al. (2012) used the chi-square (X²) difference test and the
ratio of chi-square for degrees of freedom, zero-order correlations (Spearman's correlation coefficient and Pearson's correlation coefficient) among the study variables, confirmatory factor analysis (CFA) to test the factor structure, and the internal consistency (alpha) reliabilities for study variables for each sample.

The purpose of Hannah et al.’s (2012) two studies was to examine the discriminant and convergent validity of the Leadership Self and Means Efficacy measure by investigating how the new measure relates to theoretically relevant constructs. The authors examined the validity of the LEQ by conducting a set of chi-square difference tests with two samples (N = 265 and N = 216). In all, Hannah et al. (2012) reviewed six chi-square comparisons (ΔX²). Evidence of discriminant validity is obtained if the chi-square of the first model is significantly lower than that of the second model (Anderson & Gerbing, 1988; Bagozzi & Phillips, 1982). In each of the six chi-square comparisons, the first model was significantly lower than the second model (first sample ΔX² = 56.94, 45.42, 168.14; second sample ΔX² = 62.58, 197.16, 76.58). These results indicated that the chi-square in which the two factors under consideration are allowed to correlate is in all cases significantly lower than when the correlation is fixed at zero, providing support for discriminant validity.

**FOS validity.** With regard to convergent validity of the FOS, Linderbaum and Levy (2010) hypothesized that feedback orientation is positively associated with feedback environment (Hypothesis 1) and learning goal orientation (Hypothesis 2). Hypothesis 1 was supported by a positive correlation between feedback orientation and the feedback environment (r = .47). Hypothesis 2 was supported by a significant correlation between feedback orientation and learning goal orientation (r = .40). Regarding discriminant validity, Linderbaum and Levy (2010) hypothesized that feedback orientation would be weakly associated to social desirability.
Hypothesis 3) and to affect (Hypothesis 4). Hypothesis 3 was supported with an unmeaningful correlation ($r = .12$) between social desirability and feedback orientation. Hypothesis 4 was only moderately supported. Negative affect had an unmeaningful association ($r = -.12$) with feedback orientation. However, positive affect had a moderate association ($r = .24$) with feedback orientation. With regard to criterion-related validity, Linderbaum and Levy’s (2010) study revealed support for Hypothesis 7, with feedback utility perceptions having a significant positive association with performance appraisal utility perceptions ($r = .39$). Their study also revealed support for Hypothesis 8; utility had a significant positive correlation with perceived benefits of development ($r = .30$). Regarding accountability, Hypothesis 9 was supported; accountability had a significant positive correlation with intention to use feedback ($r = .48$). Linderbaum and Levy’s (2010) study also supported Hypothesis 10; accountability had a significant positive correlation with role clarity ($r = .22$). For social awareness, Hypothesis 11 was supported; social awareness had a moderate positive correlation with self-monitoring ($r = .24$). Support was also found for Hypothesis 12; social awareness was significantly associated with feedback intentions ($r = .46$). Regarding feedback self-efficacy, Hypothesis 13 was supported; feedback self-efficacy had a significant positive correlation with performance appraisal session satisfaction ($r = .35$). Support was also found for Hypothesis 14; feedback self-efficacy had a significant positive correlation with leader reports of an employee’s participation in development ($r = .36$). Finally, Hypothesis 15 was supported; feedback orientation had a significant positive correlation with self-reported feedback seeking ($r = .44$).

**Study internal and external validation.** Internal validity in quantitative research is how legitimate are the study and the research findings (Creswell, 2014). According to this definition, this quantitative research study possesses high validity, measures what it intends to measure, and
produces positive outcomes in practice. Researchers frequently generate hypotheses that can be tested in research to validate the correlation (Walker, 2005). Such is the case in this study since the researcher was able to test the null hypothesis via significance level testing (alpha). Further, the study is valid because it is based on the self-observed means of the participants and therefore measures what the study claims to measure. External validity provides for researchers to consider the research study’s potential for replication. Therefore, the focus on the external validity of this research was on the accuracy of the data gathered and the appropriate analysis by the researcher to be confirmed by others. Even though this quantitative correlational study employs Pearson and Spearman correlation coefficient analyses, other researchers can perform similar research and analyses, such as linear regression, using the study’s independent and dependent variables.

The reliability and convergent and discriminant validity of the LEQ and FOS confirm these instruments are appropriate for this research. The creators of the LEQ and FOS employed the test of statistical significance (alpha) to verify instrument reliability. Hannah et al. (2012) used the chi-square ($X^2$) difference test and zero-order correlations to establish the LEQ’s validity, and Linderbaum and Levy (2010) established validity by confirming their hypotheses. The internal and external validity of this study confirms it is suitable for correlational research.

**Transition and Summary**

Organizations are constantly changing, creating wide-ranging challenges for leaders. To meet these challenges, leaders must not only have the required knowledge, skills, and abilities, but also the necessary efficacy to effectively employ those capabilities across dynamic contexts. Correlational designs have a central role in the development of new knowledge, generating questions and hypotheses that could form the basis of furthering leadership development.
research. Highly effective leadership requires that leaders be confident they can enact complex leadership styles and techniques.

The researcher developed the research method and design of this research to address the specific research question. The researcher chose the feedback orientation and leadership self-efficacy variables because of their relevance to the research question. Quantitative analysis of the data collected allowed the researcher to arrive at conclusions based on the information. The Pearson correlation coefficient and Spearman’s rho correlation coefficient analyses were appropriate statistical techniques to explain the correlation of variables postulated by the research hypothesis.

The results of previous studies provide additional evidence concerning the convergent validity of the Feedback Orientation Scale (FOS) by showing that feedback orientation was positively related to achievement motivation and to having an incremental implicit person theory. These studies also provide evidence concerning the reliability and validity of the FOS by showing that feedback orientation predicted leaders’ openness and reactions to candid feedback.

The Leader Efficacy Questionnaire (LEQ) has been demonstrated to promote transformational leadership style in previous studies. Leader efficacy is recognized as a key factor that pushes leader readiness—the degree that a leader is motivated to develop his or her leadership acumen, and therefore perceives he or she has the capacity for development. These studies provide evidence concerning the reliability and validity of the LEQ by demonstrating that leadership self-efficacy can be changed and developed over time (Hannah & Avolio, 2010).

The next section, Section 3, presents a practical application of the research’s findings and implications for change. This section begins with a brief overview of the research addressing effective leadership practices along with a review of the questions or issues being addressed.
Also, recommendations for action, recommendations for further study, reflections of research experiences, a summary, and researcher conclusions from the research are covered in this section.
Section 3: Applications to Professional Practice and Implications for Change

The development of leaders is often stated as a primary goal in many organizations. In this study, the researcher suggests there has been relatively little discussion in literature concerning the relationship between feedback orientation and leadership self-efficacy and how they collectively affect leadership performance. To stay competitive, military units must approach leadership growth from different avenues. Military units are challenged to understand the distinct needs and motivators of each leader. Effectively employing feedback in a way that tackles individual differences can support an engaging work environment, thereby leading to a competitive advantage. Also, leaders high in leadership self-efficacy normally think in a self-enhancing way by motivating themselves and persevering in the face of adversity (Bandura & Locke, 2003).

In Section 3, the researcher includes a brief overview of the study and a presentation of the findings, which includes instrument data, analysis, conclusions, and evidence related the study’s research questions and hypotheses. In addition, this section discusses applications to the professional practice of business and recommendations for action and further study. Finally, Section 3 and the body of the study concludes with reflections from the researcher and a summary and study conclusion.

Overview of Study

Military organizations acknowledge that talented leaders are vital to organizational success and are a valuable asset. Air Force Field Grade Officers (FGO) must not only be willing to receive and implement critical feedback, but also possess the leadership self-efficacy that offers the psychological context required to employ leadership across a wide range of global challenges. Since FGOS’ operational environment is multifaceted, research focusing on the
correlation between feedback orientation and leadership self-efficacy in a dynamic environment is warranted. Dahling et al. (2012) argued that feedback orientation is considered to be a major piece of specific leadership performance processes, but very little empirical research exists to support these propositions. According to Hannah et al. (2012), previous research has been narrowly focused on leaders’ self-efficacy for what they believe they can do, and often in narrowly defined tasks and contexts, which likely underestimates the complex and dynamic contexts that most leaders and followers operate.

This research included a non-experimental correlation research method to garner information from Air Force FGO’s view of feedback orientation and leadership self-efficacy in the military. In recent years, feedback orientation and leadership self-efficacy is commonly seen as variables influencing the performance of leaders. Linderbaum and Levy (2010) created and validated the Feedback Orientation Survey (FOS) based on the measures of utility, accountability, self-efficacy, and social awareness. The authors selected these measures on the basis of theories of attitude and motivation and the belief that satisfaction with feedback might influence organizational and job attitudes. Hannah et al. (2012) assessed and validated the Leadership Efficacy Questionnaire (LEQ) based on Leader Self and Means Efficacy Theory, which they argued is a critical driver of leadership success in challenging and dynamic contexts. The advantage of pursuing further conceptual and empirical development of the leadership self-efficacy construct is it is developable and has demonstrated support for predicting leader motivation, leadership styles, and performance (Hannah et al., 2012). These theories are all positive elements for what should constitute and genuinely develop optimal leadership potential. A principal goal of this study is to articulate research finding and interpret the association between feedback orientation and leadership self-efficacy in military officers.
Presentation of the Findings

The researcher employed the research instrument, containing the informed consent, background questions, Feedback Orientation Survey (FOS) and Leadership Efficacy Questionnaire (LEQ) via hard copies with the population (N = 180) of FGOs at Robins Air Force Base. The small population and sample size is not generalizable to the U.S. Air Force or the military in general. Two responses were found to be incomplete and were deleted; no other data errors or discrepancies were discovered. Of the 180 potential respondents, 144 expressed interest and were provided a hard copy of the survey instrument; 131 actually completed the survey, representing a 90.9% response rate. The following research data and statistical results are derived from the sample (N = 131).

As expected, in this research, feedback orientation was significantly and positively related to leadership self-efficacy. The findings of this research demonstrate there is a moderate positive relationship between feedback orientation and leadership self-efficacy within military leadership. The results contribute empirical data in the area of FGO leadership perception. This information is vital to understanding if military officers’ perception of feedback and self-efficacy are mutually inclusive. The application of feedback and building leadership self-efficacy is advanced through this research’s contribution to academic literature.

The researcher utilized IBM SPSS software by testing whether the FOS and LEQ variables are positively correlated in the FGO population. Pearson correlation coefficient and Spearman’s correlation coefficient (Spearman’s rho) were employed to investigate the strength of correlation between the independent variable, feedback orientation, and the dependent variable, leadership self-efficacy. The researcher employed descriptive statistics and Z scores to identify outliers in the data from the FOS and LEQ survey instruments. Further normality
analysis entailed the visual inspection of frequency histograms and Q-Q plots along with the measuring of skewness and kurtosis and Shapiro-Wilk tests for determination of normal distribution within an acceptable range. An examination of participant background information and how it influenced the variables were relevant to this research with the intention of identifying characteristics and factors contributing to similarities and differences between demographics.

**Demographic Characteristics**

The research instrument contained questions relating to the demographic background of the FGO participants. The researcher transferred the demographic data for the sample (N = 131) from hard copy surveys into MS Excel to calculate frequency distributions. The broad spectrum of diverse FGO respondents provided the research with a similar FGO demographic structure to the U.S. military. The frequencies distributions of the demographic data are provided in Tables 1 – 5.

Table 1 displays the frequency distribution of gender.

**Table 1**

*Frequency Distribution of Gender (N = 131)*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>21</td>
<td>17%</td>
</tr>
<tr>
<td>Male</td>
<td>110</td>
<td>83%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

Regarding gender, the majority or 110 (83%) out of the 131 samples were male while female participants resulted in 21 (17%).

Table 2 displays the frequency distribution of rank.
Table 2

*Frequency Distribution of Rank (N = 131)*

<table>
<thead>
<tr>
<th>Rank</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>68</td>
<td>52%</td>
</tr>
<tr>
<td>Lt Col</td>
<td>54</td>
<td>41%</td>
</tr>
<tr>
<td>Col</td>
<td>9</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

In terms of military rank for the 131 samples, there were 58 (52%) Majors, 54 (41%) Lieutenant Colonels, and 9 (7%) Colonels.

Table 3 displays the frequency distribution of line officers.

Table 3

*Frequency Distribution of Line Officers (N = 131)*

<table>
<thead>
<tr>
<th>Line Officer</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>96</td>
<td>74%</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>26%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

For the Line Officer demographic, 96 (74%) out of the 131 samples were Line Officers, 35 (26%) were Non-Line Officers.

Table 4 displays the frequency distribution of aeronautical rated officers.

Table 4

*Frequency Distribution of Aeronautical Rating (N = 131)*

<table>
<thead>
<tr>
<th>Aeronautical Rating</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>81</td>
<td>62%</td>
</tr>
<tr>
<td>No</td>
<td>50</td>
<td>38%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

The Rated Officer demographic consisted of 81 (62%) Rated Officers while Non-Rated Officer consisted of 50 (38%).

Table 5 displays the frequency distribution of years served in the military.
The Years of Experience demographic was heavily weighted toward Over 20 Years Served at 53 (40%). The other levels of years served in the military consisted of 17 – 20 (21%), 13 – 16 (25%), 9 – 12 (10%), and 5 – 8 (4%). These demographic numbers demonstrate FGO’s are in most cases seasoned military officers.

**Feedback Orientation Survey (FOS)**

The research instrument included the FOS relating to the feedback orientation in Field Grade Officers (FGO). The 20-item survey utilized a Likert-type scale ranging from 1 to 5, where 1 is strongly disagree and 5 is strongly agree. Of the sample (N = 131), 131 (100%) completed each of the 20 items in the FOS portion of the instrument.

Table 6 displays the frequency distribution of FOS total scores.

Table 5

*Frequency Distribution of Years Served in the Military (N = 131)*

<table>
<thead>
<tr>
<th>Years Served</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – 8</td>
<td>5</td>
<td>4%</td>
</tr>
<tr>
<td>9 – 12</td>
<td>13</td>
<td>10%</td>
</tr>
<tr>
<td>13 – 16</td>
<td>33</td>
<td>25%</td>
</tr>
<tr>
<td>17 – 20</td>
<td>27</td>
<td>21%</td>
</tr>
<tr>
<td>Over 20</td>
<td>53</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 6

*Frequency Distribution of FOS Total Scores (N = 131)*

<table>
<thead>
<tr>
<th>FOS Total Scores</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7 to 3.0</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>3.1 to 3.5</td>
<td>12</td>
<td>9%</td>
</tr>
<tr>
<td>3.6 to 4.0</td>
<td>44</td>
<td>33%</td>
</tr>
<tr>
<td>4.1 to 4.5</td>
<td>52</td>
<td>40%</td>
</tr>
<tr>
<td>4.6 to 5.0</td>
<td>21</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>
The researcher employed descriptive statistics (Table 7), histogram (Figure 4), skewness and kurtosis (Table 8), Q-Q plot (Figure 5), and Shapiro-Wilk test (Table 9), to observe the normality of the FOS data distribution.

Table 7 displays the descriptive statistics of FOS scores.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>131</td>
<td>2.75</td>
<td>5</td>
<td>4.053</td>
<td>.433</td>
</tr>
<tr>
<td>Z score</td>
<td>131</td>
<td>-3.008</td>
<td>2.184</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The moderate standard deviation indicated the FOS scores tended to be moderately close to the mean. Z scores were used to identify outliers in the data from the FOS. The researcher considered one FOS Z score (-3.008) to be an outlier since it was three times the standard deviation on the minimum side (Lane, 2003). Though, since the remainder of the FOS data for the respondents were within normal ranges and because nonparametric tests were implemented, the data from the one respondent was not eliminated from the overall data set.

Figure 4 displays the frequency histogram of FOS total scores.
To determine normality graphically, the researcher employed the output of a frequency histogram for the FOS score. From the frequency histogram in Figure 4, the FOS data are relatively normally distributed as the bars are slightly skewed to the left. The histogram has a prominent mound in the center and with tapering to the left and right.

Table 8 displays skewness and kurtosis of FOS scores.

Table 8

| Skewness and Kurtosis of FOS Scores (N = 131) |
|-------------------|-------------------|-------------------|
| N                 | Valid             | 131               |
| Missing           | 0                 |
| Skewness          | -.305             |
| Std. Error of Skewness | .211           |
| Kurtosis          | -.177             |
| Std. Error of Kurtosis | .438            |
The FOS scores are slightly skewed to the left as the skewness is negative and below 1. As a rule of thumb, a skewness value more than twice its standard error is taken to indicate a non-normal distribution (Miles & Shevlin, 2001). The researcher multiplied the Std. Error of Skewness by 2 (2 x 2.11 = .422), and proved the Skewness (-.305) was less than the twice the Std. Error of Skewness (.305 < .422). Therefore, the researcher concluded the distribution of the FOS sample to be normal. The negative Kurtosis score (-.177) from the FOS data implies a distribution with less extreme possible data values than a normal distribution, thus possessing smaller tails.

Figure 6 displays the frequency histogram of LEQ total scores.

Figure 5 displays the Q-Q plot of FOS total scores.

![Normal Q-Q Plot of FOS](image)

*Figure 5. Q-Q plot of FOS scores.*
To determine normality graphically, the researcher employed the output of a normal Q-Q Plot. From the normal Q-Q plot in Figure 5, the FOS data are normally distributed as the data points are close to the diagonal line. A visual inspection of the Q-Q plot confirms the FOS data are normally distributed.

Table 9 displays the Shapiro-Wilk test of FOS total scores.

Table 9

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.991</td>
<td>131</td>
<td>.563</td>
</tr>
</tbody>
</table>

Since the Sig. value (p = .563) of the Shapiro-Wilk Test is greater than 0.05 (p > .05), the data are normal. Large values of the Sig. statistic greater than .05 are evidence of normality (Shapiro & Wilk, 1965).

**Leader Efficacy Questionnaire (LEQ)**

The research instrument included the LEQ relating to the leadership self-efficacy in FGOs. The 22-item questionnaire asked FGOs to respond to the items on a 0–100 scale, reflecting their efficacy strength. A score of 100 represents 100% confidence, whereas a score of 0 means no confidence at all. Of the sample (N = 131), 131 (100%) completed each of the 22 items in the LEQ portion of the instrument.

Table 10 displays the frequency distribution of LEQ total scores.
Table 10

Frequency Distribution of LEQ Total Scores (N = 131)

<table>
<thead>
<tr>
<th>LEQ Total Scores</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 to 50</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>51 to 60</td>
<td>4</td>
<td>3%</td>
</tr>
<tr>
<td>61 to 70</td>
<td>10</td>
<td>8%</td>
</tr>
<tr>
<td>71 to 80</td>
<td>27</td>
<td>20%</td>
</tr>
<tr>
<td>81 to 90</td>
<td>62</td>
<td>47%</td>
</tr>
<tr>
<td>91 to 98</td>
<td>27</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>131</td>
<td>100%</td>
</tr>
</tbody>
</table>

The researcher employed descriptive statistics (Table 11) histogram (Figure 6), skewness and kurtosis (Table 12), Q-Q plot (Figure 7), and Shapiro-Wilk test (Table 13), to observe the normality of the LEQ data distribution.

Table 11 displays the descriptive statistics of LEQ scores.

Table 11

Descriptive Statistics of LEQ Scores (N = 131)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEQ</td>
<td>131</td>
<td>53.18</td>
<td>98.23</td>
<td>82.17</td>
<td>9.93</td>
</tr>
<tr>
<td>Z score</td>
<td>131</td>
<td>-2.949</td>
<td>1.632</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The moderate standard deviation indicated the LEQ scores tended to be moderately close to the mean. Z scores were used to identify outliers in the data from the LEQ. The researcher considered two LEQ Z scores (-2.949, -2.902) to be outliers since they very close to three times the standard deviation on the minimum side (Lane, 2003). However, because the remainder of the LEQ data for the respondents were within normal ranges and since nonparametric tests were implemented, the data from the two respondents were not eliminated from the overall data set.

Figure 6 displays the frequency histogram of LEQ scores.
From the frequency histogram Figure 6, the LEQ data are not normally distributed as the bars are highly skewed to the left. The left-skewed histogram has a peak to the right of center, more gradually tapering to the left side.

Table 12 displays skewness and kurtosis of LEQ total scores.

Table 12

<table>
<thead>
<tr>
<th></th>
<th>Valid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
<td>-1.037</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>.211</td>
<td></td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.787</td>
<td></td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>.438</td>
<td></td>
</tr>
</tbody>
</table>
The LEQ scores are highly skewed to the left as the skewness is negative and above 1. The researcher multiplied the Std. Error of Skewness by 2 (2 x .211 = .422), and verified the Skewness (-1.037) was more than twice the Std. Error of Skewness (1.037 > .422). Therefore, the researcher concluded the distribution of the LEQ sample to be non-normal. The positive Kurtosis score (.787) from the LEQ data implies a distribution with more extreme possible data values than a normal distribution, hence possessing longer tails.

Figure 7 displays the Q-Q plot of LEQ total scores.

![Normal Q-Q Plot of LEQ](image)

*Figure 7. Q-Q plot of LEQ scores.*

From the normal Q-Q plot Figure 7, the LEQ data are not normally distributed as the data points stray from the diagonal line. A visual inspection of the Q-Q plot confirms the LEQ data are non-normal.

Table 13 displays the Shapiro-Wilk test of LEQ total scores.
Table 13

Shapiro-Wilk Test of LEQ Scores (N = 131)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>.924</td>
<td>131</td>
<td>.000</td>
</tr>
</tbody>
</table>

Because the Sig. value (.000) of the Shapiro-Wilk Test is less than 0.05 (p < .05), the data are non-normal. Small values of the Sig. statistic are evidence of departure from normality (Shapiro & Wilk, 1965).

Research Questions and Hypotheses

The purpose of this correlational research was to address the gaps in empirical data concerning the association between feedback orientation and leadership self-efficacy. In this research, the researcher identified feedback orientation as the independent variable, and leadership self-efficacy is as the dependent variable. Proving the correlation between the two variables, feedback orientation, and leadership self-efficacy, form the crux of the hypotheses.  

Ha1: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in FGO’s.  

H₀₁: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in FGO’s.  

The null hypothesis H₀₁ posits there is not a statistically significant relationship between feedback orientation and leadership self-efficacy. The researcher analyzed the null hypothesis H₀₁ based on the sample of the defined population and performed the Pearson correlation coefficient (Pearson’s r) and Spearman rho (Spearman’s rs) to conclude with a probability (p <.05) that findings in the sample may also be found in the population at a 95% confidence level. Based on the statistical results, the researcher rejected the null hypothesis (H₀₁) and accepted the alternative hypothesis (Ha₁).
The following hypotheses examined the level of correlation of feedback orientation and leadership self-efficacy from different groups of Field Grad Officers; specifically, comparing line officers to non-line officers and comparing aeronautical rated officers to non-rated officers.

Ha2: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

H₀₂: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

Ha3: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

H₀₃: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

Ha4: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.

H₀₄: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.

Ha5: There is a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Rated Officers.

H₀₅: There is not a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Rated Officers.

The researcher performed Pearson correlation coefficient (r) and Spearman rho (rs) via statistical software to assess the strength of correlation between the independent and dependent variable. The correlational design to test H₀₂, H₀₃, H₀₄, and H₀₅ utilized the FOS and LEQ data for the samples.
**Research question R1.** Is there a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Officers? The researcher performed the Pearson correlation coefficient (r) via statistical software to assess the strength of correlation between the independent and dependent variable. The correlational design to test H₀₁ utilized the FOS and LEQ data for the sample (N = 131).

Table 14 displays the Pearson correlation coefficient for null hypothesis H₀₁.

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>1</td>
<td>.351**</td>
</tr>
</tbody>
</table>

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

Pearson’s r resulted in the moderate relationship (N = 131) $r = 0.351$, $p < .01$ against the null hypothesis H₀₁. Therefore, the researcher rejected the null hypothesis H₀₁ validating the correlation between feedback orientation and leadership self-efficacy. Since the correlation is significant at the .01 level, there is a 1% chance the researcher will reject the null hypothesis when the null is true (Salkind, 2013). The outcome of normality testing of FOS scores and LEQ scores, using the histogram, skewness and kurtosis, Q-Q plot, and Shapiro-Wilk, confirmed the FOS data distributions are normal, and the LEQ data distributions are non-normal. Because the LEQ scores failed the normality tests, the researcher employed the non-parametric Spearman’s correlation coefficient (Spearman’s rho) for testing the null hypothesis $H₀₁$, along with the Pearson correlation coefficient (Pearson’s r).
The researcher performed Spearman rho (rs) via statistical software to assess the strength of correlation between the independent and dependent variable. The correlational design to test $H_0$ utilized the FOS and LEQ data for the sample ($N = 131$).

Table 15 displays Spearman’s rho for null hypothesis $H_0$.

Table 15

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>Spearman Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (two-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>131</td>
</tr>
<tr>
<td>LEQ</td>
<td>Spearman Correlation</td>
<td>.386**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Spearman’s rs resulted in the moderate relationship ($N = 131$) $rs = 0.386$, $p < .01$ against the null hypothesis $H_0$. Therefore, the researcher rejected the null hypothesis $H_0$—once more validating the correlation between feedback orientation and leadership self-efficacy. Again, since the correlation is significant at the .01 level for the Spearman rho statistic, there is a 1% chance the researcher will reject the null hypothesis when the null is true (Salkind, 2013). The findings from the Pearson’s correlation coefficient and Spearman’s rho has provided meaningful additional data to the knowledge gap between feedback orientation and leadership self-efficacy thereby paving the way for applications in leadership practices.

**Research question R2.** Is there a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers? The researcher performed Pearson correlation coefficient (r) via statistical software to assess the strength of correlation
between the independent and dependent variable. The correlational design to test H₀₂ utilized the FOS and LEQ data for the sample (N = 96).

Table 16 displays the Pearson correlation coefficient for line officer null hypothesis H₀₂.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td>.329**</td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
</tr>
</tbody>
</table>

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

Pearson’s r resulted in the moderate relationship (N = 96) r = 0.329, p < .01 against the null hypothesis H₀₂. Therefore, the researcher rejected the null hypothesis H₀₂ validating the correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

Table 17 displays Spearman’s rho for line officer null hypothesis H₀₂.

Table 17

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman Correlation</td>
<td>1</td>
<td>.368**</td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>96</td>
<td>96</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
Spearman’s rs resulted in the moderate relationship (N = 96) rs = 0.368, p < .01 against the null hypothesis H02. Therefore, the researcher rejected the null hypothesis H02 and accepted the alternative hypothesis Ha2—once again validating the correlation between feedback orientation and leadership self-efficacy in Field Grade Line Officers.

**Research question R3.** Is there a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers? The researcher performed Pearson correlation coefficient (r) via statistical software to assess the strength of correlation between the independent and dependent variable. The correlational design to test H03 utilized the FOS and LEQ data for the sample (N = 35).

Table 18 displays the Pearson correlation coefficient for non-line officer null hypothesis H03.

Table 18

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FOS</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td><strong>LEQ</strong></td>
<td>Pearson Correlation</td>
<td>.308</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

Pearson’s r resulted in weak relationship (N = 35) r = 0.117, p > .05 against the null hypothesis H02. The results (p > .05, .117) were not statistically significant; therefore, the researcher failed to reject the null hypothesis H03 and failed to accept the alternative hypothesis Ha3. This validated a weak correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

Table 19 displays Spearman’s rho for non-line officer null hypothesis H03.
Table 19

*Spearman’s rho for Non-Line Officer Null Hypothesis H₀₃ (N = 35)*

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig.</td>
<td>(two-tailed)</td>
<td>.050</td>
</tr>
<tr>
<td>N</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.333</td>
</tr>
<tr>
<td>Sig.</td>
<td>(2-tailed)</td>
<td>.050</td>
</tr>
<tr>
<td>N</td>
<td>35</td>
<td>35</td>
</tr>
</tbody>
</table>

Spearman’s rs resulted in a nonsignificant moderate relationship (N = 35, rs = 0.333, p = .05) against the null hypothesis H₀₃. Therefore, the researcher failed to reject the null hypothesis H₀₃ and failed to accept the alternative hypothesis Ha₃ because there was a nonsignificant relationship at p = .05. These results validate the correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Line Officers.

**Line officer comparison.** Both line officer Pearson r and Spearman rs outcomes resulted in statistically significant (p < .01) correlations; whereas, non-line officer Pearson r and Spearman rs outcomes did not result in statistically significant correlations. In fact, the researcher failed to reject the null hypothesis H₀₃ for non-line officers. The difference in correlations may be due to the depth and lack of leadership experience non-line officers undergo owing to their position. For example, attorneys, physicians, and chaplains, serving as non-line officers, are critically manned professionals often only leading a few individuals and serving in small units. This type of environment can limit the amount of feedback imparted up-and-down as the pool of potential military professionals willing to provide feedback is reduced significantly. Furthermore, because smaller units limit the scale and amount of challenges leaders may confront by the reduced amount of personnel issues, non-line officers are at a
disadvantage in building their leadership self-efficacy. To be fair, these professionals do
routinely lead military members working directly under them.

**Research question R4.** Is there a statistically significant correlation between feedback
orientation and leadership self-efficacy in Field Grade Rated Officers? The researcher
performed Pearson correlation coefficient \((r)\) via statistical software to assess the strength of
correlation between the independent and dependent variable. The correlational design to test \(H_0\)
utilized the FOS and LEQ data for the sample \((N = 81)\).

Table 20 displays the Pearson correlation coefficient for rated officer null hypothesis
\(H_0\).

Table 20

<table>
<thead>
<tr>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation for Rated Officer Null Hypothesis (H_0) ((N = 81))</strong></td>
<td>FOS</td>
</tr>
<tr>
<td>FOS</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (two-tailed)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>81</td>
</tr>
<tr>
<td>LEQ</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>81</td>
</tr>
</tbody>
</table>

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

Pearson’s \(r\) resulted in a moderate relationship \((N = 81)\) \(r = 0.339, p < .01\) against the null
hypothesis \(H_0\), and the correlation was significant (.002). Therefore, the researcher rejected the
null hypothesis \(H_0\) and accepted the alternative hypothesis \(H_a\) validating the correlation
between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.

Table 21 displays Spearman’s rho for rated officer null hypothesis \(H_0\).
Table 21

*Spearman’s rho for Rated Officer Null Hypothesis H₀₄ (N = 81)*

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>Spearman Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (two-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>81</td>
</tr>
<tr>
<td>LEQ</td>
<td>Spearman Correlation</td>
<td>.388**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>81</td>
</tr>
</tbody>
</table>

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

Spearman’s rs resulted in the moderate relationship (N = 81) rs = 0.388, p < .01 against the null hypothesis H₀₄. Therefore, the researcher rejected the null hypothesis H₀₄ and accepted the alternative hypothesis Hₐ₄—once more validating the correlation between feedback orientation and leadership self-efficacy in Field Grade Rated Officers.

**Research question R₅.** Is there a statistically significant correlation between feedback orientation and leadership self-efficacy in Field Grade Non-Rated Officers? The researcher performed Pearson correlation coefficient (r) via statistical software to assess the strength of correlation between the independent and dependent variable. The correlational design to test H₀₅ utilized the FOS and LEQ data for the sample (N = 50).

Table 22 displays the Pearson correlation coefficient for non-rated null hypothesis H₀₅.
Table 22

*Pearson Correlation for Non-Rated Officer Null Hypothesis H05 (N = 50)*

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (two-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>LEQ</td>
<td>Pearson Correlation</td>
<td>.278</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.078</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

Pearson’s r resulted in a weak relationship (N = 50) r = 0.339, p > .01 against the null hypothesis H04. However, the results (p > .05, .078) were not statistically significant. Therefore, based on this data, the researcher chose to assess the Spearman rs results before accepting or rejecting the null hypothesis H05.

Table 23 displays Spearman’s rho for non-rated officer null hypothesis H05.

Table 23

*Spearman’s rho for Non-Rated Officer Null Hypothesis H05 (N = 50)*

<table>
<thead>
<tr>
<th></th>
<th>FOS</th>
<th>LEQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOS</td>
<td>Spearman Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (two-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>LEQ</td>
<td>Spearman Correlation</td>
<td>.306*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

Spearman’s rs resulted in the moderate relationship (N = 50) rs = 0.306, p < .05 against the null hypothesis H04. Since the results were statistically significant (p < .05, .031), the researcher rejected the null hypothesis H05 and accepted the alternative hypothesis Ha5.
**Rated officer comparison.** Rated officer Pearson r and Spearman rs outcomes resulted in statistically significant (p < .01) correlations; whereas, the non-rated officer Pearson r calculation resulted in a nonsignificant weak correlation (.278). Interestingly, Spearman rs outcomes for non-rated officers did result in statistically significant correlation (p < .05). The Pearson and Spearman calculations (r = .339, rs = .388; r = .278, rs = .306) for rated and non-rated officer respectively differed in individual group correlation. The higher rated officer correlations may be due to an environment of immediate leadership feedback during flights from other crew members and feedback following flights during the debrief, especially in combat environments. Owing to a higher feedback environment, rated officers gain leadership self-efficacy as they develop their leadership skills by changing behavior based on past effective feedback.

**Summary of findings.** Three noteworthy outcomes encapsulate the presentation of findings. First, the statistical outcome of research question R1 rejected the null hypothesis $H_0$; therefore, feedback orientation was significantly and positively related to leadership self-efficacy. The findings of this research validate there is a moderate positive relationship between feedback orientation and leadership self-efficacy within Field Grade Officers (FGO). Second, non-line officer statistical findings did not result in statistically significant correlations; whereas, line officer statistical findings did result in statistically significant correlations. Third, non-rated officer statistical findings did result in statistically significant correlations, while rated officer statistical findings also resulted in statistically significant correlations. As a point of interest, the comparison of line and rated officers revealed that work environments, position contexts, and combat settings may influence FGO’s feedback orientation and leadership self-efficacy. All three outcomes add empirical data in the area of FGO leadership perception. Taking entirety of
the statistical correlational results into account, military and business leaders can practice specific applications in their unit or industry.

**Applications to Professional Practice**

The results of the research revealed a positive correlation between feedback orientation and leadership self-efficacy in Field Grade Officers (FGO). The parametric and nonparametric calculations allowed the researcher to conclude there is a statistically significant correlation between feedback orientation and leadership self-efficacy within military leadership. The findings of this research applies to the professional development of military officers, particularly potential upcoming leaders. Training and development of leaders is viewed as essential for any organization to include soft skills. Not only are the research finding applicable to military leaders but also applicable to different facets of leadership development; specifically, military and civilian leadership self-efficacy development and feedback orientation development. A biblical framework related to leadership also lends value to the leadership field of study.

**Leadership Self-Efficacy Development**

In the context of leadership, understanding one’s level of leadership self-efficacy is a critical step in increasing one’s confidence. Leadership self-efficacy is a positive influence process as perceptions of a leader's confidence will influence the extent that leader engenders respect and credibility from others. Subordinates, for instance, would not want to follow a leader who appears to lack in confidence. Frequently, when a leader does not exhibit confidence in their own decisions and actions, they do not engender confidence in their subordinates. Measures such as the Leader Efficacy Questionnaire (LEQ), can function as one part of a 360-rating measure as leaders compare how their self-ratings compare with others' ratings of the level of leader efficacy they exhibit. Past research employing 360-rating measures has established that
leader self and means efficacy can be improved through mentoring and coaching programs and targeted leader development programs (Hannah et al., 2012).

Increasing leaders’ self-efficacy is employed in a variety of different leadership training programs from undergraduates to senior executive leaders in a diversity of industries (Hannah & Avolio, 2010). The concepts of leadership self-efficacy are straightforward and simple for leaders to comprehend regarding how they might develop their leadership approach and influence (Hannah et al., 2008; Hannah et al., 2012). Military leader strategies for changing other aspects of leadership, such becoming transformational, or focusing on improving their subordinates’ development, includes military leaders’ perception of their level of leadership self-efficacy and impact (Hannah et al., 2012). Leaders’ self-efficacy views are often distinct from their actual capabilities, just as self-efficacy beliefs are divergent from means-efficacy (Hannah et al., 2008; Paglis, 2010). Leaders' self-efficacy includes both their perception of their abilities and how those abilities can be exploited in challenging environments and contexts. Hannah et al. (2012) suggested that efficacy beliefs of highly self-aware leaders will be based on realistic assessments of their actual capabilities.

Military leader development goals should not necessarily focus on developing one’s leadership self-efficacy only. Instead developmental goals should connect to other specific leadership styles and orientation, such as means-efficacy. For instance, military leaders should increase their means-efficacy by tying developmental goals to leading groups, and the context of leading individuals (Hannah et al., 2012). Hence, as military leaders consider how to increase their means-efficacy, they will need to consider what they are trying to accomplish, with whom and the environment. Fighting for feedback will assist military leaders in this endeavor–how else will military leaders fully understand their environment?
Practical interventions for developing leadership self-efficacy in military leaders is enhanced by providing strategic position placement throughout their career (Paglis, 2010). The goal of developing personal mastery experiences and building strong efficacy views, for example, begins with military organizations identifying potential high-profile military leaders early in their careers (Paglis, 2010). Units can then offer these officers a string of developmental assignments intended to present them the opportunity to undergo and cope with leadership challenges in fairly low-threat, experiential learning settings. Moreover, providing formal and informal feedback to these future high-profile leaders should be the focus at each level and each assignment.

**Feedback Orientation Development**

Rasheed et al.’s (2015) findings that the relationship between the measures of FOS (utility, accountability, self-efficacy, and social awareness) and performance is mediated by satisfaction with feedback creating new opportunities for the mitigation of the negative effects of unfavorable feedback. This shows that leaders with higher feedback orientation in terms of utility, accountability, self-efficacy, and social awareness toward feedback are more likely to be satisfied with the feedback provided to them, even unfavorable, as long as it is constructive and leads them to improve their in-role performance (Rasheed et al., 2015). Therefore, the goal of increasing military leaders’ feedback orientation is facilitated through increasing their overall satisfaction with feedback. Superordinates who take a genuine role in providing candid feedback, play a crucial part in developing military leaders’ feedback orientation. When superordinates are perceived in the military organization as competent leaders, they may serve as effective role models for their followers. Knowledge gained through vicarious experience can help followers discover effective leadership behaviors and strategies and build confidence that
they can handle feedback appropriately and therefore perform in a likewise manner. Thus, military leader assignment placement with appropriate transformational superordinates plays a crucial role in developing feedback orientation and leadership self-efficacy.

Previous research indicates the appropriate coupling of transformational superordinates to subordinates may be critical for the most powerful modeling-efficacy results to occur (Barclay et al., 2007). Along with modeling leadership behavior to military leaders, superordinates providing arduous yet attainable learning goals, along with encouraging feedback, could be an alternative way in which they positively influence their subordinates’ leadership self-efficacy. This strategy offers a couple of implications for the practice pertaining to feedback orientation development and mentoring. First, He et al. (2016) found that leaders with strong learning goal orientations are likely to learn from feedback when confronting challenges. Second, avoidance-oriented leaders are focused on failure prevention and are risk-sensitive (Simmons & Ren, 2009). Thus, superordinates should promote a low threat environment of learning through risk-taking. The low threat environment entails superordinates providing encouraging feedback—especially when there is an opportunity to learn from failure.

Leaders with a more positive feedback orientation also reported more positive reactions to their 360-degree feedback. Employing 360-degree measures, such as the Feedback Orientation Scale (FOS), to superordinates and subordinates can be useful to military organizational decision makers (e.g., Air Force Personnel Center, Human Resources) as it helps them to identify which leaders model encouraging feedback as well as those who have higher readiness for undertaking feedback-intensive development programs or assignments. It is also possible that defensiveness to feedback is lessened by efforts to develop the recipient’s leadership self-efficacy as the two variables have been demonstrated to be mutually inclusive.
Using feedback to pursue and attain behavior change and attainable goals over time can increase the leaders’ feedback orientation (Linderbaum & Levey, 2010; Braddy et al., 2013). Goal setting leads to behavior change especially when the individual has a positive feedback orientation. As more and more military leaders in their units have positive experiences with feedback, the organization’s feedback culture will become stronger (London & Smither, 2002). Thus, positive experiences with feedback can further enhance the feedback orientation of individuals in the organization. Conversely, leaders must engender confidence they can exploit and harness candid feedback. Effective military leaders are likely to interpret such negative feedback from others as diagnostic information that may improve self-insight and advance self-betterment, thereby strengthening their efficacy and performance as a leader (Janssen & Prins, 2007).

**Biblical Framework**

Successes and failures contribute to a perception of self-efficacy, although when faced with unfamiliar situations, the faith of the individual replaces experience. We can see an example of this in the account of Elijah’s confrontation with Baal’s priests. The writer of 1 Kings 18 details Elijah engaging the priests of Baal and challenging them to a contest in which the priests would call upon their god to bring fire down and light the sacrificial fire. After the priests of Baal failed, Elijah took his turn and increased the difficulty by soaking the wood and the offering with water. Filled with faith and confidence, Elijah prayed, and fire came from Heaven and consumed not only the wood and the offering but the entire altar. In 1 Kings 18:37-38 (NIV), the writer points out:
Answer me, Lord, answer me, so these people will know that you, Lord, are God, and that you are turning their hearts back again. Then the fire of the Lord fell and burned up the sacrifice, the wood, the stones and the soil, and also licked up the water in the trench. Elijah did not seek his own glory, but that of God, for the good of the people. As leaders, by gaining faith and confidence in God’s power, their leadership efficacy will increase—accomplishing God’s will for them in their profession.

**Recommendations for Action**

This research provided evidence that feedback orientation correlates to leadership self-efficacy. Nonetheless, there are actions relating to this study that civilian and military organizations can take to cultivate effective leadership. The actions include promoting professional continuing education, position rotation, feedback-seeking behavior, executive coaching interventions, and human resource management intervention.

**Professional Continuing Education**

The results of the research provided insight into leadership development by enhancing feedback orientation and leadership self-efficacy in FGOs. Senior level management should foster leadership development by encouraging self-development to improve one’s leadership abilities. Examples include off-duty academia, professional readings, and professional societies specific to building leadership acumen. This technique is relevant and is the frequently utilized technique of military officers and company executives (Newcomer et al., 2014). Upper echelon military officers should encourage other military officers to pursue professional continuing education as a means of remaining competitive with peers; specifically, leadership self-efficacy education. Since educational programs based on social cognitive theory have proven successful in the area of self-efficacy (Van Dinther, Dochy, & Segers, 2011), leaders should pursue
operational cognitive readiness and strategic cognitive readiness courses. Courses modeled after the Special Operations Cognitive Enhancement and Performance (SOCEP) program are suitable.

**Position Rotation**

One of the possible explanations for the correlation between feedback orientation and leadership self-efficacy in FGOs is high years of experience of FGOs. For example, 40% of FGO’s surveyed in the research have served over 20 years in the military, while 86% have served over 13 years. The level of job continuity in the military allows for multiple position rotations. The leadership development strategy of position rotation provides comprehensive experience and promotes experiential learning through recurring movement to increasingly more responsible jobs, thus developing leadership competency and efficacy (Hezlett, 2016). Further, the strategy of position rotation is relevant to leadership development as the feedback environment in the new position will most likely change offering leaders a different outlook. If the military solely focuses on honing FGO’s tactical edge concerning specific assignments, then these officers may not develop the required characteristics for strategic insight. For instance, J5 positions located at the Pentagon would provide the appropriate level of experience in building strategic acumen. The Joint (multiservice) Staff J5 proposes strategies, plans, and policy recommendations to the Chairman of the Joint Chiefs of Staff.

**Feedback-Seeking Behavior**

Past research has focused a certain amount of depth on the situational influence that business environments have on leadership (Campbell et al., 2010). Interestingly, rated officer’s scores (4.18, 82.84) were slightly higher on both the FOS and LEQ, respectively, juxtaposed to non-rated officer’s scores (4.03, 81.52). The difference in scores may be due to the subtle differences in their feedback and leadership environment. Although non-rated officers tend to
experience more opportunities to lead large groups of enlisted personnel, rated officers receive more immediate feedback due to regular sortie (flight) debriefs. As a result, rated officers operate in a culture of receiving candid feedback on their leadership performance more often; in many cases from seasoned enlisted leaders. Hence, a non-rated officer’s feedback orientation may be enhanced by working in an environment where frank and honest feedback is imparted on a regular basis. Weekly “debriefs” by immediate superordinates concerning the non-rated officer’s performance would provide the non-rated officer the context for behavioral change as well as instill confidence through positive feedback. Wang et al. (2016) discovered when leaders experience beneficial superordinate behavior, such as transformational leadership, those who have strong reciprocity beliefs feel compelled to reciprocate their superordinate’s behavior by displaying positive feedback-seeking behavior. To promote leaders’ feedback-seeking, businesses and military leadership should train and develop executives and FGOs in transformational leadership. Several top universities and institutions offer leadership courses specializing in MBA-level transformational concepts and practices. These opportunities are normally offered only at the Colonel or Navy Captain level; however, Lieutenant Colonels and Majors would benefit from these transformation leadership building opportunities.

**Executive Coaching Intervention**

The type of feedback, positive or negative, that leaders receive matters. Understanding a leader’s feedback orientation will provide insight into the level to which an individual will be open and responsive to developmental interventions (Bailey & Austin, 2006). The FOS could be administered, for example, as part of an evaluation to ascertain how open a leader is to developmental feedback. Recognizing a leader’s feedback orientation would provide insight into the coachability of the leader or where the leader may need additional support in responding to
feedback. If a leader scores low on feedback self-efficacy, this may determine how feedback is provided and can provide a starting place for coaching the individual. Furthermore, providing an individual with feedback on his or her openness to feedback may help that individual better understand why others do not give him or her feedback. Braddy et al. (2013) determined that leaders who received more positive feedback are less defensive in their feedback sessions than were leaders who received less positive feedback. As such, coaches can assume that, on average, leaders with less favorable feedback will tend to be more defensive in their sessions (Braddy et al., 2013). Also, leaders with high self-efficacy are more likely to tackle significant behavioral change than leaders with a low self-efficacy (Ladegard & Gjerde, 2014). The coaches’ objective should be to support and encourage the leader that has weak self-efficacy by promoting confidence in the leader. Assigning an executive coach to an FGO while the FGO is transitioning between assignments will allow the FGO to debrief the outgoing assignment and prepare for the incoming assignment. Corporations often try this approach during an executive’s position transition (Underhill, 2008).

**Human Resource Management Intervention**

Human resource programs may be designed to develop feedback orientation and leadership self-efficacy by explaining and demonstrating its value, how each is pursued, and launching accountability mechanisms that gauge feedback use and resulting behavior change (Rasheed et al., 2015). Thus, building the organization’s feedback culture by influencing the quality of the feedback will most likely increase the leadership self-efficacy in leaders in the organization. Human resource managers should ensure executive coaches are confident and competent enough to provide facilitative feedback during the coaching process to ensure effective leadership development (Ladegard & Gjerde, 2014). Additionally, human resource
programs could recommend stress management to leaders dealing with anxiety and pressure, and institute steps to remove any stigma surrounding feedback (Paglis, 2010). Human resource managers should suggest that leaders exhibiting signs of workplace stress participate in cognitive behavioral therapy as a retention strategy. The goal of cognitive behavioral therapy is to modify patterns of thinking or behavior that are behind leaders’ difficulties, and so alter the way they feel. Executive coaches routinely employ this practice as a strategy to assist leaders struggling with stress (Good, Yeganeh, & Yeganeh, 2013). This strategy can aid some otherwise highly capable leaders avoid the efficacy-debilitating effects of workplace anxiety and pressure.

**Recommendations for Further Study**

Future studies should continue to evaluate the relative contributions of the Leader Efficacy Questionnaire (LEQ) and Feedback Orientation Scale (FOS) to our understanding of leadership behavior and performance. Further, researchers should study causation between the two variables, actual behavioral change from feedback interventions, how leadership characteristics shape the relationship between feedback orientation and leadership self-efficacy, and pinpointing leadership self-efficacy’s optimal level.

**Causation**

Just because the two variables are positively correlated and share something in common in FGOs, it has no bearing on whether a causal relationship exists between the two (Salkind, 2013). Future research should investigate the extent feedback orientation influences leadership self-efficacy. The goal would be proving a cause and effect, which social scientists identify as probable causation (Creswell, 2014). By determining the degree one variable is reinforcing the other rather than each variable reciprocally reinforcing each other, then there is an opportunity to
develop the independent variable (feedback orientation), thereby reinforcing the dependent variable (leadership self-efficacy).

**Actual Behavioral Change**

Additional research is needed to examine whether feedback orientation is related to actual behavioral change after participants receive feedback. In particular, future research should investigate whether feedback orientation is related to actions leaders take to enhance their self-efficacy after receiving feedback and their actual performance improvement after receiving feedback. Also, researchers could examine how targeted interventions, such as coaching to increase openness to feedback, can help individuals with a negative feedback orientation become more successful in dealing with and responding to feedback, thereby increasing leadership self-efficacy (Ladegard & Gjerde, 2014).

**Leadership Characteristics’ Impact**

One promising direction for future research would be to go beyond the correlation between feedback orientation and leadership self-efficacy to extend an understanding of how other leadership characteristics and contextual factors shape the relationship between feedback orientation and leadership self-efficacy. Beginning with the dimensions of feedback orientation (utility, accountability, social awareness, and feedback self-efficacy), researchers could target the dimensions’ underlining theoretical guides, such as motivational and attitudinal, by examining how enhancing these dimensions in military officers shape their leadership self-efficacy (Linderbaum & Levy, 2010). It would be particularly interesting to study how military leaders perceive formal leadership development’s impact on both feedback orientation and leadership self-efficacy.
Leadership Self-Efficacy Optimal Level

While considerable evidence details the meaningful effect of self-efficacy on performance both by and large and in leadership development, future research could assess whether there is an optimal point beyond which extreme levels may be harmful (Hannah et al., 2012). In combat, one can picture a situation in which an overly confident FGO sets impossible objectives for warfighters or pursues irrational risks with the unit’s resources. This scenario may explain why a leader is high in leadership self-efficacy but low in feedback orientation. The premise is that the overconfident FGO feels he or she has no room for improvement; therefore the leader shuns feedback or at least disregards feedback. One of the negative effects of unchecked leadership efficacy may be diminished collective-efficacy, as subordinates become dejected about exorbitant expectations or distrustful about exaggerated objectives and impractical plans. Collective efficacy is defined as the mutual belief of group members about their group’s abilities (Watson, Chemers, & Preiser, 2001). Therefore, future research could focus pinpointing a mastery level conducive to inspiring and developing others as well as advancing themselves.

Public and Private Sector Leaders

Leadership development is viewed as a critical factor in order to create future leaders among civilians in both the private sector and the public sector. Some public organizations are described as being somewhat bureaucratic and some private organizations are labeled as unstructured. These scenarios offer potentially rich leadership research regarding the correlation between civil service leaders’ and private sector leaders’ feedback orientation and leadership self-efficacy. The study of the association between this study’s research variables should not be confined only to military organizations. Rather, future studies could explicitly theorize about
how public leaders’ feedback orientation and leadership self-efficacy correlation compares to private sector leaders’ feedback orientation and leadership self-efficacy. Public organizations regularly operate in a relatively complex environment, which entails a variety of stakeholders, and often conflicting objectives (Van der Voet, Kuipers, & Groeneveld, 2016). Contrast this complex environment with the private sectors’ for-profit outlook and it should make for interesting research.

**Other Military Bases**

The sample for this research was limited to a single Air Force Base. With a total U.S. Air Force Field Grade Officer (FGO) population of 39,295 (“2015 Demographics,” 2015), a larger population and sample size was unrealistic given the time and geographic constraints. Samples should be chosen from populations that match as closely as possible the attributes of the research population (Salkind, 2013). Although Robins Air Force Base was representative of a population of FGOs, assessing the feedback orientation and leadership self-efficacy of FGOs serving at other military bases around the world may further address gaps in military leadership theory. Moreover, future researchers may find comparing FGOs of other armed services as noteworthy correlational research.

**Reflections**

Providing effective leadership to military units is at the core of FGO duties. The researcher had a strong desire understand the influence feedback orientation and leadership self-efficacy has on FGO’s ability to provide potent leadership. By presenting this correlational study, the researcher aimed to provide a resource for leadership researchers who desire to learn more about leadership issues facing the modern military. Having served in the military for over 27 years, the researcher has received and imparted feedback at multiple levels within the U.S.
military. The researcher has also experienced seasons of leadership self-doubt along with seasons of increased leadership self-efficacy. The results of the study validated, to a certain degree, the researcher’s estimation of the association between feedback orientation and leadership self-efficacy.

Researchers have an ethical duty to outline the limitations of studies and account for potential sources of bias. When analyzing the data, the researcher made efforts to avoid analysis bias—searching for data that confirmed the study’s hypotheses or researcher’s personal experience and overlooking data inconsistent with personal beliefs (Smith & Noble, 2014). Also, the researcher reduced selection bias by the random selection of participants within a specific stratum. The researcher attempted to make the study representative by including FGOs from each stratum. The closed end questions found in both the FOS and LEQ survey instruments mitigated any personal bias. Due to previous experiences working closely with many of the respondents, the researcher brought certain biases to this study. Although every effort was made to ensure objectivity, these biases may shape the way the researcher viewed and understood the data collected and the way the researcher interpreted the results. Capable leaders today, as well as long ago during biblical times, do not normally let biases get in the way of receiving and applying sound feedback.

**Biblical Principles**

King Solomon understood the value of sound feedback when he wrote in Proverbs 19:20 (NIV), “Listen to advice and accept discipline, and at the end you will be counted among the wise. Many are the plans in a person’s heart, but it is the Lord’s purpose that prevails.” Solomon’s wisdom was renowned, yet he appreciated the worth of wise counsel. In today’s changing environment, leadership development has become a necessary component of the
military’s efforts to enhance quality leadership development, to retain key leaders, and to endure the challenges of global adversaries.

One’s efficacy should not be entirely in oneself, but in the Lord, so that he or she is quick to give the glory to God in every situation. A humble leader is continually aware that all leadership ability stems from God’s grace. In Psalm 71:5 (AMP), the writer says, “For You are my hope; O Lord God, You are my trust from my youth and the source of my confidence.”

Confidence in God gives Christians who view their job as a tool in God’s hands reason to approach each day’s endeavors with optimism, hope, and conviction (Van Duzer, 2010). When leaders put their trust in God and His revealed Word, their careers take on a new stability, focus, and self-assurance. Business and military leaders frequently face tough times and challenging decisions. Leadership can be arduous and a lonely calling, nonetheless, one aspect of living for Jesus is the complete assurance that even in the most difficult moments, we are not alone. As leaders focus on the positive, it inspires them to think about opportunities as opposed to threats.

**Summary and Study Conclusions**

In today’s changing environment, enhanced leadership performance has become a necessary component of the U.S. military’s efforts to endure the challenges of global adversaries and to retain key leaders. The efficiency and survival of military units are dependent on the selection and development of future leaders. It is evident that organizations of all sizes face significant challenges in preparing leaders that can handle major organizational challenges. Organizations must be willing to invest in building leadership capabilities at all levels of the organization to be successful.
The study aimed to determine the correlation between feedback orientation and leadership self-efficacy. The results of this study provide practical information closing the gap in the current body of literature concerning feedback orientation and leadership self-efficacy. The significant influence of effective feedback on individual performance has been well established (Linderbaum & Levy, 2010), and research demonstrates that leaders strong in leadership self-efficacy realize superior outcomes, both in terms of their leadership performance and in their ability to motivate subordinates to increased levels of collective efficacy and performance (Hannah & Avolio, 2010). The results of this research reveal there is a moderate positive relationship between feedback orientation and leadership self-efficacy within military leaders. The findings offer empirical data in the area of leadership performance regarding FGOs. This information is fundamental to understanding if military officers’ perception of feedback and self-efficacy are mutually inclusive. Finally, the researcher advanced the application of feedback and building leadership self-efficacy through this research’s contribution to academic literature.

If God’s purpose for some individuals is to lead in their profession, then the way to serve God best is to lead others by example. Keller and Alsdorf (2012) explained a fundamental way one can love others in his or her work is through the ministry of competence. Leaders who grasp this idea of work will desire to succeed by not only refining and building on their competence, but also the competence in those they lead.
References


DeRue, D., & Wellman, N. (2009). Developing leaders via experience: The role of
developmental challenge, learning orientation, and feedback availability. *Journal of

leaders to 360-degree feedback from subordinates and peers. *The Leadership Quarterly,

*Journal of Organizational Change Management, 20*(3), 370-387. doi:
10.1108/09534810710740191

693-727. doi: 10.1016/j.leaqua.2003.09.001

empowering, but not all the time: Feedback orientation as a critical moderator. *Journal of


A self-based model of authentic leader and follower development, *The Leadership
Quarterly, 16*(2005), 343-372. doi: 10.1016/j.leaqua.2005.03.003

leadership, and employee creativity: The mediating role of employee creativity self-
efficacy. *Academy of Management Journal, 52*(4), 765-778. doi:
10.5465/AMJ.2009.43670890


Appendix A: Participant Consent Form

The Liberty University
Institutional
Review Board has approved
this document for use from
11/29/2017 to --
Protocol # 3046.112917

CONSENT FORM
Investigating the Links between Feedback Orientation and Leadership Self-Efficacy in Field
Grade Officers
Robby A. Key
Liberty University
School of Business

You are invited to be in a research study of correlational relationships between feedback
orientation and leadership self-efficacy in Field Grade Officers (FGO). You were selected as a
possible participant because you are currently an FGO. Please read this form and ask any
questions you may have before agreeing to be in the study.

Robby A. Key, a doctoral candidate in the School of Business at Liberty University, is
conducting this research.

Background Information: The purpose of this research is to examine if there is a positive
correlation between feedback orientation and leadership self-efficacy in FGO’s, thereby
understanding how these two variables influence leadership growth.

Procedures: If you agree to be in this research, I would ask you to take the attached
approximately 10-minute survey and questionnaire.

Risks and Benefits of Participation: The risks involved in this research are minimal, which
means they are equal to the risks you would encounter in everyday life. Participants should not
expect to receive a direct benefit from taking part in this study.

Compensation: Participants will not be compensated for participating in this research.

Confidentiality: The records of this research will be kept private. In any sort of report I might
publish, I will not include any information that will make it possible to identify a subject.
Research records will be stored securely and only the researcher will have access to the records.
All documents will be stored in a secure cabinet for a period of three-years. After that time, all
documents will be destroyed by shredding. There are no anticipated uses for the data after
completion of the dissertation.

Voluntary Nature of the Study: Participation in this research is voluntary. Your decision
whether or not to participate will not affect your current or future relations with Liberty
University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**Contacts and Questions:** The researcher conducting this study is Robby A. Key. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at 478-550-1015 or rkey@liberty.edu. You may also contact the researcher’s faculty advisor, Dr. Mark A. Davis, at madavis14@liberty.edu.

If you have any questions or concerns regarding this research and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.
Appendix B: Leader Efficacy Questionnaire Approval

Robby Key

To whom it may concern,

This letter is to grant permission for Robby Key to use the following copyright material for his/her research:

Instrument: Leader Efficacy Questionnaire

Authors: Sean T. Hannan and Bruce J. Avolio

Copyright: Leader Efficacy Questionnaire Copyright (c) 2013 by Sean T. Hannan and Bruce J. Avolio.

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Mind Garden, Inc.
www.mindgarden.com
Appendix C: Feedback Orientation Scale

Key, Robby Anthony

From: Levy, Paul E <plevey@uakron.edu>
Sent: Sunday, February 19, 2017 10:48 PM
To: Key, Robby Anthony
Subject: Re: Feedback Orientation Scale (FOS) permission

Absolutely, Robby, feel free to use our scale. I would appreciate hearing about your findings when you complete your study.

Good luck,

PEL

Sent from my iPad
Dr. Paul E. Levy
Professor and Chair
Department of Psychology
University of Akron
Akron, Ohio 44325-4301
plevey@uakron.edu
330 972-8369 (work)
330 687-4698 (cell)

On Feb 19, 2017, at 10:32 PM, Key, Robby Anthony <rkey@liberty.edu> wrote:

Dr. Levy,

I respectfully request permission to use the Feedback Orientation Scale (FOS) for research in completing my doctoral dissertation. I am currently a doctoral candidate at Liberty University pursuing a Doctor of Business Administration degree. The following are specifics of my research:

Project title:

Investigating the links between feedback orientation and leadership self-efficacy in Field Grade Officers

Research focus:

This study will demonstrate if FGO leadership self-efficacy is positively correlated to FGO feedback orientation.

Key hypotheses:
Key, Robby Anthony

From: Linderbaum, Beth (Cleveland) <Beth.Linderbaum@right.com>
Sent: Tuesday, February 21, 2017 7:07 AM
To: Key, Robby Anthony
Subject: Re: Feedback Orientation Scale (FOS) permission

Feel free to use it for research. Good luck with your dissertation!

Beth

On Feb 19, 2017, at 10:28 PM, Key, Robby Anthony <rkey@liberty.edu> wrote:

Dr. Linderbaum,

I respectfully request permission to use the Feedback Orientation Scale (FOS) for research in completing my doctoral dissertation. I am currently a doctoral candidate at Liberty University pursuing a Doctor of Business Administration degree. The following are specifics of my research:

Project title:
Investigating the links between feedback orientation and leadership self-efficacy in Field Grade Officers

Research focus:
This study will demonstrate if FGO leadership self-efficacy is positively correlated to FGO feedback orientation.

Key hypotheses:
There is a positive correlation between feedback orientation and leadership self-efficacy in FGO's.

Sample Characteristics:
Gender, Age, Military Rank

Research method:
Pearson Coefficient Correlation

Organizational characteristics:
Appendix D: Instrument Sample Questions

BACKGROUND INFORMATION

Directions: Please circle your answer.

1. What is your gender?
   a. Male
   b. Female
2. What is your rank?
   a. Major
   b. Lieutenant Colonel
   c. Colonel
3. Are you a Line Officer (command authority)?
   a. Yes
   b. No
4. Do you have an Aeronautical Rating?
   a. Yes
   b. No
5. How many years have you served in the military?
   a. 5 – 8
   b. 9 – 12
   c. 13 – 16
   d. 17 – 20
   e. Over 20
Feedback Orientation Scale (Linderbaum & Levy, 2010)

**Directions:** As a leader, how we respond to feedback is important. Please answer the following items with (1) being that you strongly disagree with the statement up through (5) being that you strongly agree with the statement. Please circle your answer.

<table>
<thead>
<tr>
<th>Utility</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback contributes to my success at work.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>To develop my skills at work, I rely on feedback.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Feedback is critical for improving performance.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Leadership Efficacy Questionnaire (Hannah & Avolio, 2013).

**Directions:** Think about yourself as a leader in your organization and for each item below, indicate your level of confidence. A score of 100 represents 100% confidence, whereas a score of 0 means no confidence at all. Write your score in the box to the right of each item.

<table>
<thead>
<tr>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all Confident</td>
<td>Moderately Confident</td>
<td>Totally Confident</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**As a Leader I can...**

1. Energize my followers to achieve their best
2. Develop agreements with followers to enhance their participation
3. Coach followers to assume greater responsibilities for leadership
Appendix E: IRB Exemption

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD

November 29, 2017

Robby A. Key
IRB Exemption 3046 112917: Investigating the Links between Feedback Orientation and Leadership Self-Efficacy in Field Grade Officers

Dear Robby A. Key,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46.101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
   (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

[Signature]

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

Liberty University | Training Champions for Christ since 1971