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Analysis of Factors Related to Turnover Intentions Within the Financial Management (65Fx/65Wx) Career Field

THESIS

Virginia Lee Galbraith, First Lieutenant, USAF

AFIT-ENV-MS-17-M-187

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

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THESIS

Presented to the Faculty

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Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Cost Analysis

Virginia Lee Galbraith, BS, MBA

First Lieutenant, USAF

March 2017

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AFIT-ENV-MS-17-M-187

Analysis of Factors Related to Turnover Intentions Among the Financial Management (65Fx/65Wx) Career Field

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Abstract

There is currently a shortage of field grade officers within the United States Air Force's Financial Management and Cost Analysis (65Fx/65Wx) career field. A questionnaire was distributed to all officers within the career field (N = 618) in order to identify the values and career intentions of the career field's current officer workforce. Constructs such as organizational commitment, burnout, and perceived availability of civilian job opportunities were analyzed to determine their impacts on an officer's turnover intentions. Demographics such as commissioning source, current job type, current job location, and time in service were also analyzed to see how they may impact long-term career intentions. Results of this survey indicated that first lieutenants expressed the lowest desire to serve for at least 20 years, had the highest levels of burnout, and the lowest organizational commitment levels. The research team also analyzed whether or not a significant difference exists between officers who have completed the Air Force Institute of Technology's Graduate Cost Analysis (GCA) program and officers who have not completed the program – in terms of burnout, organizational commitment, and perceived availability of job alternatives. No significant differences were found between the two groups of 65Fx/65Wx officers.

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Virginia L. Galbraith

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Analysis of Factors Related to Turnover Intentions Among the Financial Management (65Fx/65Wx) Career Field

I. Introduction

General Issue

The United States Air Force (USAF) tasks the officer corps to achieve the mission and objectives of the Air Force. In order to become a commissioned officer, the candidate must complete four years of training at the United States Air Force Academy, complete the Reserved Officer Corps Training (ROTC) program, or complete Officer Training School (OTS). With exceptions for the medical, legal, and chaplain specialties, commissioned officers enter the Air Force at the lowest commissioned rank (Second Lieutenant/O-1), and then work their way to higher ranks via an established promotion system. The Air Force places high emphasis on developing these leaders, and the United States of America invests millions of taxpayer dollars each year to ensure that these officers are equipped with the necessary leadership skills and technical skills. For example, the Air Force estimated that the cost to produce just one officer through the United States Air Force Academy in Colorado Springs, Colorado costs $534,206 as of June 2015 (United States Air Force, 2016).

The majority of non-rated Air Force officers incur an active duty service commitment (ADSC) of four or five years, depending on the commissioning source, and then may choose to either separate from the active duty Air Force or continue serving (Department of the Air Force, 2012). Under the current military retirement system, personnel can acquire full retirement benefits after serving 20 years of active duty service. Since the Air Force does not utilize lateral recruitment efforts, and instead relies

on growing and developing their own senior leaders, personnel shortages can arise when large percentages of Company Grade Officers (CGOs) choose to voluntarily separate from the service. Company grade officers are junior officers who hold the rank of Second Lieutenant (O-1), First Lieutenant (O-2), or Captain (O-3). By examining Table 1, it is clear to see that the majority of the Air Force Officer Corps is composed of CGOs – specifically, 57.15% as of June 2016 (Air Force Personnel Center, 2016). Additionally, Table 2 shows that the historical percentage of 65Fx/Wx officers that serve for a total of 20 or more years is 45.1% (Headquarters Air Force, 2016). This percentage only includes the officers that made it to the time-in-service mark of 20 years; it *does not include* officers who were offered any type of early retirement incentive package, and it *does not exclude* officers who were forced to involuntarily separate (due to administrative or medical reasons, such as force reductions, disciplinary issues, or medical discharges).

Table 2. Active Duty Officer Workforce (as of 30 June 2016)

#	%	Grade
6,674	10.86	2Lt
7,144	11.63	1Lt
21,298	34.66	Capt
12,946	21.07	Maj
9,665	15.73	Lt Col
3,425	5.57	Col
142	0.23	Brig Gen
98	0.16	Maj Gen
40	0.07	Lt Gen
12	0.02	Gen

Table 3. Historical Record of 65Fx/65Wx Officers Separations & Retirements (Feb 1991-July 2016)

Total # of Separations/Retirements	2739
# Officers Separating with ≤ 5 Yrs of Commissioned Service	633
% Officers Separating with ≤ 5 Yrs of Commissioned Service	23.1%
# Officers Separating with 6-10 Yrs of Commissioned Service	541
% Officers Separating with 6-10 Yrs of Commissioned Service	19.8%
# of Officers with ≥ 20 Yrs of Total Service	1236
Total % of Officers with ≥ 20 Yrs of Total Service	45.1%

Personnel shortages have become prevalent throughout many different career fields in the USAF. This study focused on the USAF's Financial Management and Cost Analysis career field. The mission of this career field is to "maximize resources for our nation's Air Force" and is explained in further detail in Appendix 1 (United States Air Force, 2017). The career field divides financial managers into two specialty codes; officers with the Air Force Specialty Code (AFSC) "65Fx" fall under "Budget," while officers with the AFSC "65Wx" fall under "Cost Analysis." Additionally, CGOs within the career field have the opportunity to apply for a full-time graduate student status at the Air Force Institute of Technology (AFIT), a graduate school located at Wright Patterson Air Force Base in Dayton, Ohio. Company grade officers who enroll in the AFIT Graduate Cost Analysis (GCA) program serve as full-time graduate students and earn a Master of Science in Cost Analysis upon completion of the 18-month assignment. Once they graduate from the program, they incur a three-year service commitment and are assigned to an advanced academic degree position as a cost analyst (AFSC code: 65Wx), in support of Air Force acquisition programs.

For Fiscal Year 2015, the estimated average direct and indirect cost per officer's 18-month graduate degree program at AFIT was $113,992 (Headquarters Air University,

2016). This includes the direct costs of operating the schoolhouse and the indirect costs of the base operating support. It does not include the student's pay entitlements and allowances. Additionally, there has been a strong push from senior leadership to increase the number of AFIT slots available to 65Fx/65Wx CGOs in recent years, as shown in Table 3 (Air Force Personnel Center, 2016). The percentage of graduates that are still serving in the active duty AF after fulfilling their service commitments is 40.7% for FY04-12 graduates. This percentage does not take into account the time in service that the officer acquired before entering the program; for example, by FY16, the officer may have already acquired 20 years in service and separated from the military.

Table 4. AFIT GCA Program Officer Enrollment FY04-FY16

Fiscal Year	04	05	06	07	08	09	10	11	12	13	14	15	16
# Officers in Program	7	9	6	7	8	5	5	5	2	7	9	12	14
# Officers Still in AF (as of June 2016)	1	3	0	4	3	4	3	3	1	7	9	12	14
% of Officers Still in AF (as of June 2016)	14%	33%	0%	57%	38%	80%	60%	60%	50%	100%*	100%*	100%*	100%*

* denotes that the officer's 3-year Active Duty Service Commitment has not yet been fulfilled

This career field is currently facing a shortage in the number of Field Grade Officers (FGOs) available to meet requirements, as seen in Table 4 (Headquarters Air Force, 2016). A FGO is an officer that holds the rank of major (O-4), lieutenant colonel (O-5), or Colonel (O-6). Due to the shortage of FGOs in the career field, captains selected for major, but not yet promoted to the rank, sometimes perform FGO-coded jobs. In comparison to other Air Force career fields, lieutenant colonels or majors fill the majority of squadron commander jobs.

Table 5. 65F/W Career Field Health (as of 31 May 2016)

Grade	Requirements	Inventory	Surplus/Deficit
0-1/0-2	15%	28%	+13%
0-3	30%	30%	0%
0-4	25%	19%	-14%
0-5	23%	17%	-14%
0-6	7%	6%	-1%

Formal research has been conducted on military retention for different career fields and different branches of service – as discussed in Chapter II's literature review. However, there has not been a formal study conducted to evaluate the reasons as to why 65F/W officers choose to separate from the Air Force before the 20-year time-in-service (TIS) mark.

Problem Statement

This study focused on voluntary turnover within the 65Fx/65Wx career field. After conducting a thorough review of literature, this study analyzed the following constructs to investigate the potential of a significant statistical relationship existing between the specified construct and 65Fx/65Wx officer turnover intentions: employee burnout, organizational commitment, and perceived availability of job alternatives. The researchers discuss further details on each construct in Chapter II.

Research Questions

Our research attempts to answer the following questions:

1. What demographic factors (if any) are influencing 65Fx and 65Wx officers to separate from the active duty Air Force before the 20-year time-in-service mark?

2. Do AFIT GCA graduates have higher turnover intentions than non-AFIT GCA graduates?

3. How do the constructs of employee burnout, organizational commitment, and perceived availability of job alternatives impact turnover intentions?

Specifically, we tested the following research hypotheses:

> *H1: 65Fx base-level officers (Comptroller Squadrons) report higher levels of burnout than their peers (65Wx Cost Analysis, 65Fx Acquisition Budget, MAJCOM/Air Staff officers).*
>
> *$H1_0$: 65Fx and 65Wx officers report equal levels of burnout, regardless of current job type.*
>
> *H2: Organizational commitment will be negatively related to turnover intentions.*
>
> *$H2_0$: There is no relation between organizational commitment and turnover intentions.*
>
> *H3: AFIT GCA graduates report higher levels of perceived availability of job alternatives than their non-AFIT peers.*
>
> *$H3_0$: AFIT GCA graduates report the same levels of perceived availability of job alternatives than their non-AFIT peers.*

Methodology

In order to conduct this study, the researchers distributed an online survey to all officers within the 65Fx/65Wx career field. The Air Force Personnel Center (AFPC) Comptroller Assignments Team sent out an informational email detailing the purpose of the study and how to access the survey. The survey was open and available for completion during a two-week timeframe. The results of the survey were analyzed with Statistical Package for the Social Sciences (SPSS) software.

The primary intent of this study is to reveal the factors that influence a 65Fx/65Wx officer to voluntarily separate from the Air Force or to remain in the service for a full career. The results of this study will be distributed to senior leaders within the career field and provide them with a more in-depth view of what financial management airmen value, as well as officer perceptions of the career field. Senior leaders will be equipped with up-to-date information on their workforce that may assist in implementing

changes in policy or organizational structure. The data and findings may also be applicable to various career fields within the USAF and aid in future manpower projections. For example, findings from this study may also correlate with other occupational specialties in the support or acquisition officer career fields.

Summary

This chapter introduced the research topic and defined the problem statement and methodology used within this study. Chapter II includes a thorough review of the literature and defines the constructs tested within this study. The chapter also highlights findings from past studies conducted on employee turnover. Chapter III focuses on the methodology used to construct and distribute the online survey. Chapter IV details the findings from the data analysis conducted on the survey results. The final chapter discusses limitations of this research, along with a discussion of the findings and recommendations for possible future research areas.

II. Literature Review

Some researchers define employee turnover as the act of "employees leaving the organization for whatever reason(s)" (Phillips & Connell, 2003). It is not something new to organizations. Civilian organizations, as well as nonprofit and government organizations, have faced the challenges associated with employee turnover. In fact, a study conducted by a corporation called Right Management reported that "Only 61 percent of recent college graduates planned to stay at their first job for less than three years" (Ruiz, 2007). In other words, only 39% of recent college graduates planned to stick with their first employer for more than three years. As for the Air Force, approximately 38% of officers expect to make it to the 20-year time-in-service mark (Military Compensation and Retirement Modernization Commission, 2015). Differences in Air Force career fields, as well as the enlisted versus officer corps, may contribute to reasons as to why this number differs from the percentage reported earlier in Table 2.

There are two classifications of employee turnover: involuntary and voluntary. Involuntary turnover is "presumed to be within the control of the organizational leaders" and can be associated with firing or laying-off workers or, in the military, discharging an airman (Holtom, Mitchell, Lee, & Eberly, 2008). Voluntary turnover "reflects an employee's decision to leave an organization" and can be thought of as quitting a job or choosing to separate from the military (Shaw, Delery, Jenkins, & Gupta, 1998). This study focused on the latter definition, voluntary turnover, within the 65Fx/65Wx career field and aimed to identify factors that caused these officers to separate from the Air Force.

There are direct and indirect costs of employee turnover. It is estimated that for the corporate sector, "it costs about .5 times the annual salary plus benefits to replace an hourly worker, 1.5 times the annual salary plus benefits to replace a salaried employee, and as much as 5 times the annual salary plus benefits to replace an executive" (Colquitt, Lepine, & Wesson, 2011). Direct costs can include "administrative costs involved in the separation, recruitment expenses, screening costs, and training and orientation expenses for the new hire" (Colquitt, Lepine, & Wesson, 2011). Indirect costs may include losses in productivity levels and organizational performance, as well as decreases in morale across the organization. In regards to the Air Force, direct costs also include the costs associated with producing an officer through a commissioning program. A 1992 United States General Accounting Office (GAO) report stated that the costs associated with sending one officer candidate through a commissioning program varied from $29,500 to $519,000, as shown in Table 5 (United States General Accounting Office, 1992).

Table 6. Cost per Graduate by Commissioning Program in 1992 (not broken out by military branch)

Commissioning Program	Cost of Producing One Officer
Service Academy	$342,000 to $519,000
Reserve Officers' Training Corps (ROTC)	$104,100 to $121,500 for those receiving scholarships; average of $69,400 for those who do not
Officer Training School (OTS)	$29,500 to $46,900

*NOTE: Amounts inflated to 2016 values from 1992 values

Additionally, as noted in Chapter I, the military does not use lateral recruitment to fill officer or enlisted positions. Lateral recruitment is "the process of hiring an 'expert' [from another organization] for the job that needs to be filled" (HR Helpboard, 2016).

Corporations in the civilian sector may be able to rely on hiring employees from outside of their business when an employee decides to leave the company, but the Air Force is unable to replace a Captain with 8 years of specialized experience just by sending an officer candidate through a commissioning program. "Developing military leaders is a long, arduous, and resource intensive process. A captain cannot simply be created… all officers begin as lieutenants and must proceed through a promotion process" (Falk & Rogers, 2011). The researchers classify the situation in which the Air Force loses human capital (i.e. an officer with years of expertise and specialized training) as an indirect cost of employee turnover that should be of utmost concern to Air Force senior leaders.

Previous Military Retention Studies

Many studies have analyzed retention within the United States Armed Forces. Some of the studies assessed the military, as a whole, while others have targeted individual career fields and specific officer ranks. Factors such as low job satisfaction and frustration with the military's personnel system have been highlighted as possible causes for separation, while compensation usually is not a primary driver.

Status of Forces Study: Short-Term versus Long-Term Retention

Since 2002, the Defense Research, Surveys, and Statistics Center located at the Defense Manpower Data Center (DMDC) in Alexandria, Virginia has conducted an annual "Status of Forces" survey of active duty military members. The 2014 version of the survey contained 222 questions that assessed attitudes and opinions on various personnel issues, such as job satisfaction, retention, tempo, readiness, stress, and satisfaction of programs and services offered to military members. The researchers conducted the survey via a web-based questionnaire accompanied by e-mail and postal

notifications. It had a sample size of 65,097 with a response rate of 21% (margin of error ± 1.3%), and it included members from the Army, Navy, Air Force, and Marine Corps. Of the 13,447 total respondents, 1,781 were Air Force officers (960 between the ranks of O1-O3 and 821 between the ranks of O4-O6). The average years of total active duty service for the O1-O3 group was 5.8 years and 17.1 years for the O4-O6 group. It is important to note that these officers were from various Air Force Specialty Codes (AFSC), and the *2014 Status of Forces Survey of Active Duty Members: Tabulations of Responses* report did not separate the data by AFSC.

In the study, members were asked the question: "Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?" The respondent then had to choose one of the following responses: 1-Very Unlikely, 2 – Unlikely, 3 – Neither Likely Nor Unlikely, 4 – Likely, 5 – Very Likely. The responses displayed in Table 6 show that 66% of Company Grade Officers (CGOs) felt as if they were "likely" or "very likely" to choose to remain in the service, along with 72% of Field Grade Officers who felt similarly. Additionally, when presented with the statement: "I am committed to making the military my career," respondents had to choose one of the following responses: 1 – Strongly Disagree, 2 – Disagree, 3 – Neither Agree Nor Disagree, 4 – Agree, and 5 – Strongly Agree. The responses displayed in Table 7 show that only 48% of CGOs agreed or strongly agreed with the statement, while 78% of FGOs agreed or strongly agreed to being committed to making the military his or her career. This response indicated an 18% decrease among CGO's when comparing long-term (Table 7) versus short-term (Table 6) commitment and an 8% increase among FGO's. The researchers use these numbers for comparison in Chapter IV

to determine how the 65Fx/65Wx officer workforce compares to the total Air Force.

Table 7. 2014 Status of Forces Survey Responses for Short-Term Retention

Pay Grade	Percentages for Each Response Value					Average Likelihood
	1 – Very Unlikely	2 – Unlikely	3 – Neither Likely Nor Unlikely	4 - Likely	5 – Very Likely	
O1-O3	7%	12%	15%	30%	36%	3.8
O4-O6	7%	11%	10%	30%	42%	3.9

Table 8. 2014 Status of Forces Survey Responses for Long-Term Retention

Pay Grade	Percentages for Each Response Value					Average Likelihood
	1 – Strongly Disagree	2 – Disagree	3 – Neither Agree Nor Disagree	4 - Agree	5 – Strongly Agree	
O1-O3	8%	10%	34%	24%	24%	3.4
O4-O6	3%	5%	14%	39%	39%	4.1

Low Job Satisfaction & Frustrations with the Assignment System

In 2005, graduate-level research was conducted at the Massachusetts Institute of Technology on retention within the Air Force's 61S (Scientist), 62E (Engineer), and 63A (Program Manager) career fields. The study found that 47% of junior officers, with 3-5 years of commissioned service, surveyed in these career fields (N= 148) intended to leave the Air Force after their initial active duty service commitment. The two top reasons for intending to separate from the Air Force were lack of job satisfaction and frustration with the Air Force's assignment system. The top drivers of low job satisfaction among these junior officers revolved around: "lack of feeling value, lack of opportunity to use one's

degree or skills, lack of leadership opportunities, and lack of operational experience" (Beck, 2005). The primary grievances associated with the assignment system include the following: mismatching officers into jobs (i.e. placing a chemical engineer into a mechanical engineer slot or a scientist placed into a program manager position) and the number of reassignments associated with Air Force policies (having to relocate every 3-4 years). The study also highlighted that junior officers within these career fields did not see their work as being meaningful or valued; in fact, 66% of the lieutenants surveyed admitted that they did not understand how scientists and engineers were utilized by the Air Force.

Compensation is Not Always the Driver

A 2011 policy analysis study from the John F. Kennedy School of Government at Harvard University surveyed 242 former military officers from all four branches of service who served between 2001 and 2010, ranging in grades from O-2 to O-5. This study brought up the notion that retention and attrition studies on the military have failed to address a key point – that the military "must not only be concerned with simply maintaining *enough* personnel, but also with retaining its best and most talented" (Falk & Rogers, 2011). Falk and Rogers noted that studies tend to focus on the overall attrition statistics and not the quality of the officers actually retained. However, "the military's ability to track and target top young officers is limited – there are simply no available objective metrics on what the 'best' officers look like" (Falk & Rogers, 2011).

"Organizational flexibility" and "commitment to innovation" were the top two reported reasons for separation among this study's respondents. Organizational flexibility was the number one reason, with respondents stating that they were frustrated

with the “one-size-fits-all system” associated with the military’s personnel processes and the “limited ability to control their own careers” (Falk & Rogers, 2011). In regards to innovation, nearly half of the respondents “felt the military did a poor job at identifying and rewarding such traits as creativity, as opposed to qualities such as endurance or ability to follow orders” (Falk & Rogers, 2011).

Historically, the Air Force has offered special incentive pay bonuses in order to increase retention among specified career fields, such as the Critical Skills Retention Bonus (CSRB) and Aviation Continuation Pay (ACP). Consequently, “the ‘pay gap’ between the military and civilian professions has been an area of focus for policymakers in the past” (Falk & Rogers, 2011). However, Falk & Rogers reported that 73% of respondents stated that compensation and financial reasons were the least important considerations when deciding whether to separate from the service, while only 3% listed it as the primary reason for their separation. These results seemed to align with Beck’s 2005 study on the Air Force’s acquisition workforce where “only 24% of [that study’s respondents] felt that they were underpaid” and “regardless of job satisfaction, the majority of respondents were satisfied with pay” (Beck, 2005).

In relation to the topic of military compensation, the president of the United States has directed the Secretary of Defense to conduct a Quadrennial Review of Military Compensation (QRMC) every four years since 1965. In the Eleventh QRMC, published in June 2012, the Department of Defense reported that the average Fiscal Year 2009 Regular Military Compensation (RMC) for active duty military officers “exceeded wages for civilians with a bachelor’s or graduate-level degree” and that the “average RMC for the officer force corresponded to the 83rd percentile of wages for the civilian comparison

groups (Figure 1)" (Department of Defense, 2012). RMC includes the member's base pay salary, housing allowance, subsistence allowance, and an adjustment for federal income tax advantages (since only the member's basic pay is subject to federal income tax).

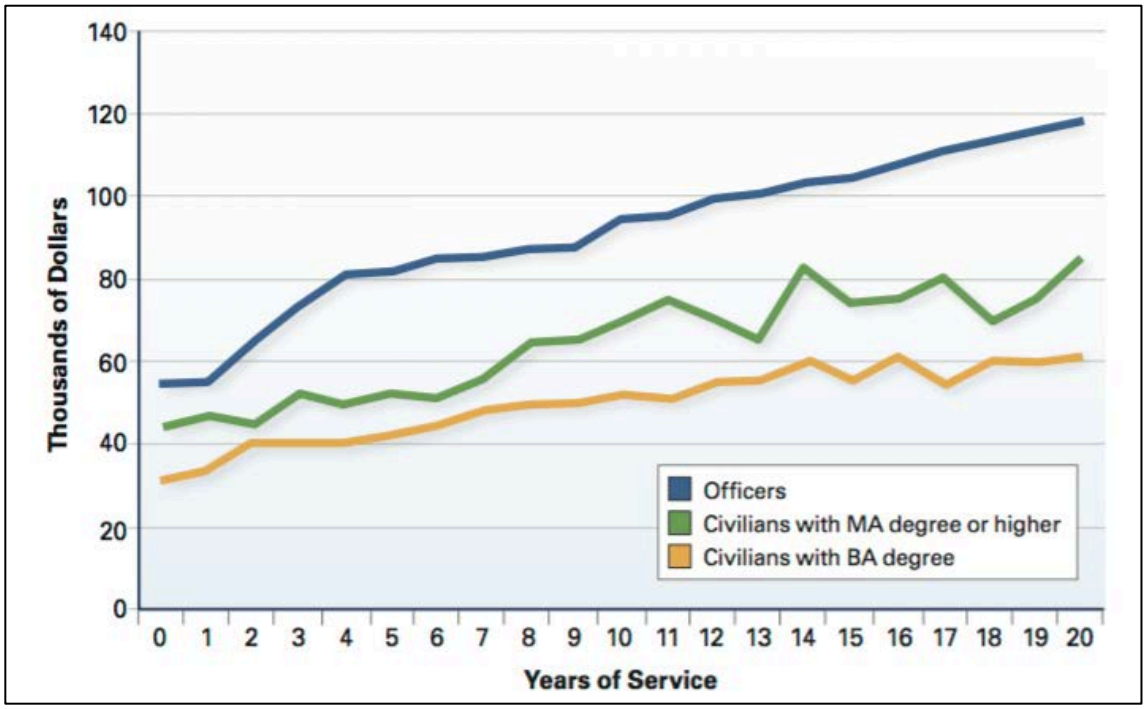

Figure 1. Fiscal Year 2009 Officer Regular Military Compensation versus Civilian Earnings (Source: QRMC report)

Constructs Addressed in This Study:

Turnover Intentions

The researchers used Bothma and Roodt's turnover intention scale (TIS-6) in this study to predict whether an officer would decide to voluntarily separate from the Air Force. The TIS-6 is comprised of six different items that have been proven to measure turnover intentions (Bothma & Roodt, 2013). Examples of items included in the TIS-6 are "*How often have you considered leaving your job?*" and "*How often do you look*

forward to another day at work?" Bothma and Roodt tested the reliability and criterion-predictive validity of the instrument on 2,429 employees in an information, communication, and technology (ICT) company. Additionally, "the TIS-6 could significantly distinguish between leavers and stayers (actual turnover), thereby confirming its criterion-predictive validity" (Bothma & Roodt, 2013). The instrument reported a Cronbach alpha value of 0.80. Dr. Roodt granted the research team permission to use the TIS-6 within this research study.

Employee Burnout

Starting in the 1980s, the topic of burnout generated the interest of many researchers within the psychology and human resource management fields. Initially, the concept of burnout was primarily used within research on the helping professions, such as caregivers and medical professionals, due to the high levels of human interaction within these career fields. Over time, the burnout concept has been applied to a broad spectrum of career fields, and many researchers argue "burnout can occur in all occupations, for anyone at any level" (Maslach, 1982).

Christina Maslach, one of the pioneering researchers on job burnout, defined burnout as "a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity" (Maslach & Jackson, 1984). She describes the first dimension, emotional exhaustion, as "wearing out, loss of energy, depletion, debilitation, and fatigue" and is "central to burnout" (Maslach, 1982). The second dimension, depersonalization, is defined as "a negative shift in responses to others," while the third dimension of reduced personal accomplishment is a "negative response toward oneself and one's personal

accomplishments" (Maslach, 1982).

The Maslach Burnout Inventory (MBI) was developed in 1981 as a standardized scale instrument to measure the three dimensions of the burnout syndrome. The MBI has been a work-in-progress, and three different versions exist today: MBI-HSS for professionals in the human services, MBI-ES for educators, and the MBI-GS for all other occupations. The original MBI instrument is composed of 22 items and takes about 10-15 minutes for respondents to complete. "The items are written in the form of statements about personal feelings or attitudes…and are answered in terms of the frequency with which the respondent experiences these feelings, on a 7-point, fully-anchored scale (ranging from 0, 'never' to 6, 'every day')" (Maslach, Jackson, & Leiter, 1996).

The MBI is the most widely used measure in research on burnout; however, the reliability and validity of the MBI has been questioned due to the structure of its items. The MBI only employs the use of one-sided wording of its items. For example, all items within a dimension are phrased in the same manner - either all negatively or all positively. "From a psychometric point of view, such one-sided scales are inferior to scales that include both positively and negatively worded items" (Anastasi, 1988). Additionally, the MBI can only be used if an official "license to reproduce" has been purchased for $2.00 per survey respondent via a website called Mind Garden ("Maslach Burnout Inventory"). Due to the limitations associated with the use of a one-sided scale and cost constraints of this research effort, the Oldenburg Burnout Inventory was employed within this study.

Evangelia Demerouti and Arnold Bakker, from the Netherlands, created the Oldenburg Burnout Inventory (OLBI) in the late 1990s. This instrument is composed of

16 items that respondents rate on a scale of 1-4 (1 = strongly disagree, 4 = strongly agree). It focuses on two dimensions linked to the concept of burnout: exhaustion and disengagement from work. "Exhaustion is defined as a consequence of intense physical, affective and cognitive strain, i.e. as a long-term consequence of prolonged exposure to certain job demands" (Demerouti & Bakker, 2008). The second dimension, disengagement, refers to:

> Distancing oneself from one's work in general, work object and work content (e.g., uninteresting, no longer challenging, but also "disgusting"). Moreover, the disengagement items concern the relationship between employees and their jobs, particularly with respect to identification with work and willingness to continue in the same occupation. Disengaged employees endorse negative attitudes toward their work objects, work content, or work in general. (Demerouti & Bakker, 2008)

The OLBI uses "both negatively and positively worded items so that not only one end of the continuum, but both ends are represented. In other words, the exhaustion and disengagement subscales include items that refer to their opposites, namely vigor and dedication, respectively" (Demerouti & Bakker, 2008). It has been tested in many different countries and occupations for reliability and validity. Examples of the OLBI items are "I always find new and interesting aspects in my work," and "There are days that I feel tired before I arrive at work."

Researchers have conducted numerous studies on burnout and its relationship to employee turnover. In a study that investigated the relationship between burnout and actual turnover in a hospital, it was found that "employees who turnover have significantly higher burnout phase scores than those who stay in the organization" (Goodman & Boss, 2002). After conducting informal interviews with current

65Fx/65Wx officers, the research team predicted that officers who serve in comptroller squadrons experience higher levels of burnout than their peers who serve in acquisition budget, cost analysis, or MAJCOM/Air Staff billets. For this study, the researchers tested the following hypothesis concerning the OLBI dimensions:

> *H1: 65Fx base-level officers (Comptroller Squadrons) report higher levels of burnout than their peers (65Wx Cost Analysis, 65Fx Acquisition Budget, MAJCOM/Air Staff officers).*
>
> *$H1_0$: 65Fx and 65Wx officers report equal levels of burnout, regardless of current job type.*

Organizational Commitment

Organizational commitment has been studied extensively since the mid-1960s; consequently, many definitions of the term "organizational commitment" have been proposed. However, certain trends exist among the varying definitions. For example, they tend to focus on commitment-related behaviors and on the individual's attitudinal commitment. As stated by Mowday, Steers, and Porter (1978), "attitudinal commitment represents a state in which an individual identifies with a particular organization and its goals and wishes to maintain membership in order to facilitate those goals." For the purpose of this study, we defined organizational commitment as "the relative strength of an individual's identification with and involvement in a particular organization" (Mowday, Steers, & Porter, 1978). This definition is characterized by the following three factors:

1) A strong belief in and acceptance of the organization's goals

2) A willingness to exert considerable effort on behalf of the organization

3) A strong desire to maintain membership in the organization (Mowday, Steers & Porter, 1978).

In comparison to job satisfaction, researchers find organizational commitment to be more stable. For example, "Although day-to-day events in the work place may affect an employee's level of job satisfaction, such transitory events should not cause an employee to seriously reevaluate his or her attachment to the overall organization" (Mowday, Steers, & Porter, 1978). In a 1974 longitudinal study of psychiatric technicians, Porter analyzed the constructs of job satisfaction and organizational commitment, as well as how they related to turnover. After conducting the study for ten and a half months, Porter made the following conclusion: "With the passage of time, organizational commitment measures proved to be a better predictor of turnover, while job satisfaction failed to predict turnover in these later time periods" (Porter, 1974). For these reasons, the research team chose to focus on measuring organizational commitment instead of job satisfaction among 65Fx/65Wx officers.

This study employed the use of the Organizational Commitment Questionnaire (OCQ) developed by Mowday, Steers, and Porter in 1978. It consists of 15 items that touch the three parts of the organizational commitment definition (previously mentioned above). Respondents grade each item against a 6-point Likert scale, ranging from "Strongly Disagree (1)" to "Strongly Agree (6)." Of the 15 items, six items are "negatively phrased and reverse coded in an effort to reduce response bias" (Mowday, Steers, & Porter, 1978). Examples of the OCQ items include: "I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful," and "Deciding to work for this organization was a definite mistake on my part."

"According to theory, employee commitment to an organization should be a fairly solid predictor of certain behaviors, especially turnover. Committed persons should be more likely to want to remain with an organization and work towards its goals" (Mowday, Steers, & Porter, 1978). In order to determine whether this theory holds true for the active duty FM officer career field, this study tested the following hypothesis:

H2: Organizational commitment will be negatively related to turnover intentions.

$H2_0$: There is no relation between organizational commitment and turnover intentions.

Perceived Availability of Job Alternatives

There is a "widespread consensus among turnover theorists on the importance of perceived [job] alternatives in shaping turnover decisions. That is, employees rarely quit work without considering alternative jobs or roles" (Griffeth, Steel, Allen, & Bryan, 2005). Numerous studies have been conducted to determine the impact of the availability of alternative jobs on turnover decisions. In 1989, Steel and Griffeth "performed a meta-analysis of the empirical literature linking measures of perceived alternatives with turnover criteria" (Griffeth, Steel, Allen, & Bryan, 2005). From this meta-analysis, researchers created a multi-dimensional measure called the Employment Opportunity Index (EOI) in order to better predict employee turnover.

Rodger Griffeth, Robert Steel, David Allen, and Norman Bryan developed the EOI and published it in the *Journal of Applied Psychology* in 2005. The EOI consists of 14 items that respondents grade according to a 7-point Likert Scale (ranging from 1 = strongly disagree to 7 = strongly agree). Some of the items are also negatively phrased and reverse-coded in order to reduce respondent bias. Examples of EOI items include:

"Given my qualifications and experience, getting a new job would not be very hard at all," and "If I looked for a job, I would probably wind up with a better job than the one I have now" (Griffeth, Steel, Allen, & Bryan, 2005).

The EOI measures five different dimensions related to perceived availability of job alternatives: ease of movement, desirability of movement, networking, crystallization of alternatives, and mobility. It bases ease of movement on the number and availability of alternate jobs, but does not take into account the social or personal implications of changing jobs. The respondent determined his/her ease of movement by analyzing his/her marketable skills and job competencies in relation to obtaining a replacement job. For example, "Jobs should appear more accessible to individuals when there is market demand for their unique skill-mix and their particular skill level is high" (Griffeth, Steel, Allen, & Bryan, 2005). Desirability of movement is "the expectation that a job change would be for the purpose of obtaining a *better* job" (Griffeth, Steel, Allen, & Bryan, 2005).

Mobility refers to the possible social, emotional, or financial impacts of changing jobs. This dimension also includes the possible impact on the worker's family, such as having to change locations, which could affect the spouse's career or the worker's children. "When physical (e.g., geographic distances) and psychological (e.g., loss of perks, dual careers) barriers impede movement, the field of potential alternatives shrinks accordingly" (Griffeth, Steel, Allen, & Bryan, 2005). This dimension may not be applicable to the active duty military workforce. For example, military officers usually have to relocate to a new geographic location every two to four years. Staying in the military results in the member having to move multiple times, regardless of possible

social, emotional, or financial impacts. However, the research team still chose to include this dimension within this study's analysis.

Crystallization of job alternatives is a dimension that measures whether or not the respondent has a definite job offer on the table versus a perceived impression of possible job alternatives. Griffeth, Steel, Allen, and Bryan (2005) claim "it makes sense to argue that well-crystallized alternatives (e.g., a firm job offer from another employer) are more likely to trigger action than are less well-crystallized alternatives (e.g., vague notions of a favorable job market)." This dimension uses only two items in order to analyze whether the respondent has a concrete job offer or not.

The last dimension, networking, measures the respondent's access to information and ability to leverage contacts in order to obtain a new job. Instead of measuring an individual's awareness or exposure to conventional job advertising, Griffeth, et al (2005) argue that an individual's social and work networks can serve as sources of job leads. For instance, "Presumably, individuals with greater access to job leads will have more information on their employment prospects" (Griffeth, Steel, Allen, & Bryan, 2005).

Moreover, the "EOI provides psychometrically sound instrumentation for an important component of contemporary turnover models (i.e., perceptions of employment alternatives)" (Griffeth, Steel, Allen, & Bryan, 2005). Consequently, this study employed the usage of the EOI measure in order to assess the perceived availability of job alternatives and how the construct impacts turnover intentions among the active duty FM officer career field. In regards to this study, the research team predicted that AFIT GCA graduates would report higher levels of perceived availability of job alternatives

than their non-AFIT peers due to possessing technical graduate degrees (Master of Science in Cost Analysis). The following research hypothesis was tested:

> *H3: AFIT GCA graduates report higher levels of perceived availability of job alternatives than their non-AFIT peers.*
>
> *$H3_0$: AFIT GCA graduates report the same levels of perceived availability of job alternatives than their non-AFIT peers.*

Summary

This chapter provided a review of literature based on the topic of employee turnover. It addressed numerous studies conducted on the topic – specifically in the military domain. The chapter also identified various constructs used to better predict turnover intentions. The subsequent chapter details the methodology used to collect the study's dataset.

III. Methodology

Chapter Overview

The Literature Review discussed the various factors that analyzed within this study and how they relate to turnover intentions of 65Fx/65Wx officers. In order to test these relations, the researchers created and distributed an online survey to the 65Fx/65Wx career field. This chapter discusses the data collection methodology.

Participants

In order to obtain a data set that was as close to the target population as possible, all active duty 65Fx/65Wx officers were invited to voluntarily participate in the research effort. The target population consisted of 618 officers, ranging in the rank from second lieutenant to colonel, as shown in Table 8 (Air Force Personnel Center, 2016). These officers serve in various duty locations throughout the Air Force and in a variety of jobs including career broadening assignments (e.g. Instructor Duty, AFIT GCA student, Inspector General, Speechwriter, Executive Officer), command positions, system program offices, and comptroller squadrons.

Table 9. Total Population of 65Fx/65Wx Officer Workforce (as of 22 August 2016)

Rank	Population
0-1	59
0-2	92
0-3	198
0-4	122
0-5	108
0-6	39

Procedure

In order to distribute a survey to active duty Air Force personnel, the researchers followed certain procedures. Since our study did not require a respondent to give any

personally identifiable information (PII), the research team was able to obtain an exemption from the full Institutional Review Board (IRB) process at the Air Force Institute of Technology. Once the exemption was obtained, the survey instrument was sent to the Air Force Survey Office located at Randolph Air Force Base, Texas for approval. The team at the Air Force Survey Office reviewed each part of the proposed survey instrument and made recommendations to the research team in order to support the best possible instrument for our data collection efforts. For example, one item read: "I am planning to look for a new job outside of the Air Force as soon as I get within one year of my service commitment," and the team at the Air Force Survey office recommended that the item be changed to: "I plan to look for a new job outside of the Air Force towards the end of my service commitment." The researchers accepted the recommended edit on the basis that some officers might begin their civilian job search more than one year out from the end of their service commitment.

After obtaining approval from the Air Force Survey office (Appendix D), the online survey instrument was created with a commercial platform called SurveyMonkey. The survey instrument contained 74 items (Appendix F) based on the instruments described in Chapter II (OCQ, OLBI, EOI), as well as demographical questions and questions related to the respondent's views of the AFIT GCA program. The primary advantages of using an online survey included minimal costs and the ease of data collection (no manual data inputting required, which reduces the risk of inaccurately recording data values). Additionally, online surveys have a significantly reduced turn-around time compared to using paper-based questionnaires, which require the use of postage services. One major disadvantage of using an online survey method instead of a

paper-based survey is the possibility of the respondent encountering technical difficulties when accessing the survey. This disadvantage is difficult to mitigate since it can arise from factors outside the scope of the researcher's control.

In order to reduce response bias, "questionnaires should be anonymous unless there are specific reasons for individuals to be identified" (Phillips & Connell, 2003). Consequently, the researchers kept the results of the survey confidential and respondents did not provide their names. The research team also explicitly stated that they would not try to identify any of the survey's respondents in hopes of increasing accurate and honest answers.

The Air Force's Comptroller Assignments team located at Randolph Air Force Base, Texas arranged for the initial distribution of the survey to all members of the target population on 05 December 2016 via an auto-generated message on the Air Force's myPers email notification system (Appendix C). In order to increase transparency and promote higher response rates, the notification email informed respondents of the purpose of the study and ensured that all responses would remain confidential. "Respondents tend to cooperate better in an activity if they understand its purpose…when a survey is administered, an explanation of its purpose and what will be done with the information should be provided" (Phillips & Connell, 2003). The initial distribution notification also contained the contact information of the research team, to allow respondents the opportunity to ask questions or express concerns about the study.

Additionally, the researchers sent a request to various senior officers within the career field to encourage each senior officer to send out additional "pushes" to their subordinate officers in order to promote a higher response rate (Appendix E). Phillips

and Connell state, “Employees may be more willing to respond to a senior executive than to a member of an HR Staff.” In accordance with the research team’s request, the Director of Financial Management at the Space and Missiles Systems Center (SMC/FM) and the Deputy Director of Financial Management and Comptroller at the Air Force Life Cycle Cost Management Center (AFLCMC/FM-FZ) sent all officers under their purview a short email urging their voluntary participation. The survey remained open for two weeks and closed on 16 December 2016.

Measures

The 74-item online survey assessed a variety of different constructs such as turnover intentions, organizational commitment, employee burnout, and perceived availability of civilian job alternatives. It also contained a demographics section, a section exclusively related to the respondent’s views of the AFIT GCA Master’s degree program, and an open-ended response section. All of the sections required answers to each item except for the section on the respondent’s views of the AFIT program and the open-ended response section. In the open-ended response section, respondents were able to provide additional feedback on the survey and their views of the career field. All constructs were measured using a 6-point Likert scale (1= Strongly Disagree, 2 = Moderately Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Moderately Agree, 6 = Strongly Agree) except for the turnover intention construct which had its own unique 5-point Likert scale.

Summary

This chapter reviewed the methodology used for data collection and discussed the extensive approval process of the survey instrument. It also discussed the components and structure of the instrument. The subsequent chapter discusses the procedures used to conduct the data analysis, as well as the results of the analyses.

IV. Analysis and Results

Chapter Overview

This chapter describes the analysis conducted on the dataset collected via the methodology described in Chapter III. First, the sample population represented by the dataset is identified. Next, the researchers used descriptive statistics to analyze the data for normality, and conducted a reliability analysis for each construct. Then, the researchers validate the individual hypothesis tests. Results from post-hoc analyses are also highlighted.

Sample Population

The online survey was accessed by 274 officers and was completed by 235 officers (an 85.8% completion rate), which equates to 38% of the total target population having completed the survey. The 39 officers who accessed the survey but failed to complete it did not submit any answers in the demographics section, while 23 of these individuals did not make it past the first section of the survey. Five individuals failed to respond to any further questions once they reached the demographics section. The decision to not complete the survey could have been a conscious decision on the respondent's part or could have been due to technical difficulties – the research team was unable to identify why the 39 respondents failed to complete the entire survey. However, the research team did receive two emails from participants citing technical difficulties while trying to complete the survey. Table 9 and Figure 2 show the rank breakdown of the total respondents who completed the survey; the 39 respondents who did not complete the survey and did not fill out any demographics are not included in Table 9 or Figure 2. Additionally, Table 9 shows that only 8 out of 39 Colonels participated in the

survey. In order to compare this group with the other officer ranks, a sample size of at least 14 Colonels is needed to capture large effects (d = 0.80) or 35 Colonels to capture medium effects (d = 0.50) (Cohen, 1992). However, the majority of tests we conducted that were broken down by rank excluded Colonels because they indicated having already served for at least 20 years.

Table 10. Sample Size versus Total Population

Rank	Population (as of 22 Aug 2016)	Sample Size	% of Population Surveyed
0-1	59	32	54%
0-2	92	38	41%
0-3	198	79	40%
0-4	122	37	30%
0-5	108	41	38%
0-6	39	8	21%

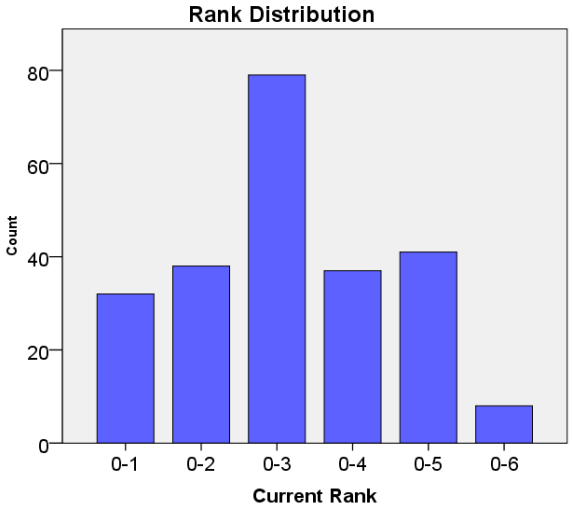

Figure 2. Rank Distribution

Of the 235 respondents, 24.3% were female and 75.7% were male. The average age of the respondents was 33 years (range 22-53 years), while the average time in service was 10.2 years (range 0-30 years). The majority of respondents (71.9%) indicated working Operations and Maintenance (O&M) job types for the majority of their

career. Of the remaining officers, 11.1% indicated Cost Analysis, 10.6% Acquisition Budget, and 6.4% as "Other" with regards to the career field that they have spent their majority of time serving in. Additionally, 21.3% of respondents indicated that they were currently enrolled in or have already completed the AFIT GCA Master's program.

Data Preparation

After the online survey closed, the researchers exported all survey results from the SurveyMonkey website to Microsoft Excel software. The data was then exported from the Excel software to SPSS software for analysis. The SurveyMonkey website automatically accounted for all "reverse-coded" items during the export process, so manual "reverse-coding" was not needed. Once the data was exported to SPSS, the average score for each survey respondent was calculated for each individual construct [i.e. Organizational Commitment (OCQ) and Turnover Intentions (TIS)] or the construct's dimensions [i.e. Disengagement and Exhaustion were calculated for the Oldenburg Burnout (OLBI) construct] (Equation 1).

$$\boldsymbol{Average\ TIS\ Score} = \frac{\boldsymbol{Item\ 1 + Item\ 2 + Item\ 3 + Item\ 4 + Item\ 5 + Item\ 6}}{\boldsymbol{Total\ \#\ of\ Items\ in\ Construct}}$$

where: Item 1-6 = the values of the respondent's answer, as pertaining to the associated Likert-scale

Equation 1**. Average TIS Score Calculation for Individual Respondents**

Normality Test

Once the researchers collected the data, they tested each construct or construct's dimensions to determine if its distribution was normal. A normal distribution has a skewness of zero and a kurtosis of zero. Skewness measures the degree and direction of

the construct's asymmetry, while kurtosis measures the overall heaviness of the tails of the construct's distribution. Generally, if the construct or dimension has a test statistic of one or below, it can be considered within the acceptable range of a normal distribution (NIST/SEMATECH, 2012). The researchers used SPSS software to analyze the skewness and kurtosis of each construct or dimension. The researchers conducted a test on the aggregated average values for each construct or dimension. All of the constructs and dimensions achieved a relatively normal distribution except for the "Mobility" dimension of the EOI construct, as shown in Table 10. This means that the items within the dimension were not very clear to the respondents or the items did not relate closely to each other. Consequently, the research team did not focus on the "Mobility" dimension within any of the analyses.

Table 11. SPSS Output for Skewness & Kurtosis

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
TIS	274	-.018	.147	-.695	.293
OCQ	251	-.530	.154	-.007	.306
Disengagement	244	-.085	.156	-.508	.310
Exhaustion	244	-.168	.156	-.229	.310
EaseofMovement	240	-.849	.157	.437	.313
DesirabilityofMovement	240	-.018	.157	-.539	.313
Networking	240	-.308	.157	-.074	.313
CrystallizationofAlt	240	.984	.157	.113	.313
Mobility	183	-1.287	.180	1.352	.357

Reliability Test

After the normality test was conducted, a reliability analysis was performed on each construct or construct's dimensions in SPSS. The Cronbach's alpha value was examined for each construct or dimension. Cronbach's alpha is "a measure of internal consistency, that is, how closely related a set of items are as a group" and the equation for calculating Cronbach's alpha is shown in Equation 2 (SPSS FAQ, 2017). More specifically, "the closer Cronbach's alpha coefficient is to 1.0, the greater the internal consistency of the items in the scale" (Gliem & Gliem, 2003). George and Mallery (2003) recommend values higher than 0.7 to be considered "acceptable." As displayed in Table 11, all of the individual constructs or dimensions achieved Cronbach's alpha values greater than 0.7 except for the "Mobility" dimension of the EOI construct.

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

where: N = number of items
$\bar{c}$ = average inter-item covariance among the items
$\bar{v}$ = average variance

Equation 2. Cronbach's Alpha

Table 12. Reliability Analysis

Construct	N of Items	Cronbach's Alpha
Turnover Intentions (TIS-6) Scale	6	0.833
Organizational Commitment (OCQ)	15	0.879
Oldenburg Burnout Inventory (OLBI) – Disengagement	7	0.892
Oldenburg Burnout Inventory (OLBI) – Exhaustion	8	0.858
Employment Opportunity Index (EOI) – Ease of Movement	3	0.747
Employment Opportunity Index (EOI) – Desirability of Movement	3	0.909
Employment Opportunity Index (EOI) – Networking	3	0.738
Employment Opportunity Index (EOI) – Crystallization of Alternatives	2	0.715
Employment Opportunity Index (EOI) – Mobility	3	0.549

Hypothesis Tests

Hypothesis Test #1:

H1: 65Fx base-level officers (Comptroller Squadrons) report higher levels of burnout than their peers (65Wx Cost Analysis, 65Fx Acquisition Budget, MAJCOM/Air Staff officers).

$H1_0$: 65Fx and 65Wx officers report equal levels of burnout, regardless of current job type.

In order to test Hypothesis 1, a One-Way Analysis of Variance (ANOVA) was conducted on each dimension that fell under the OLBI construct (disengagement and exhaustion) and the respondent's current job type as specified in Question 65 of the survey [i.e., Comptroller Squadron (CPTS), Acquisition Budget, MAJCOM/Air Staff, Cost Analysis, and Other]. The One-Way ANOVA test "compares the means of two or more independent groups in order to determine whether there is statistical evidence that

the associated population means are significantly different" ("SPSS Tutorials," 2014). This test includes the use of a dependent variable (DV) and independent variables (IV), as shown in Figure 3. The independent variable is a stimulus or input variable that causes changes in the dependent variable, which is a response or output (Patten, 2009).

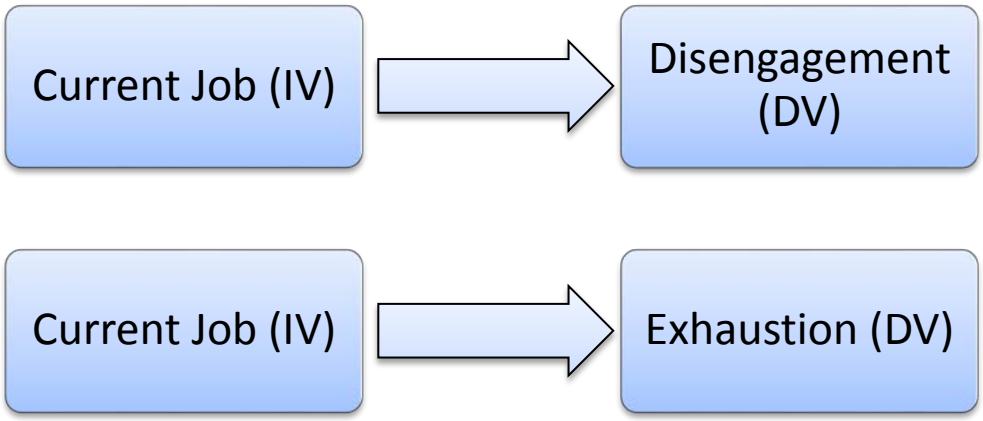

Figure 3. Hypothesis 1 Test Variables

In order to conduct a One-Way ANOVA, the following assumptions must be met: 1) the dependent variable is continuous, 2) the independent variable is categorical, 3) independent samples/groups, 4) random sample of data from the population, 5) normal distribution (approximately) of the dependent variable for each group, 6) homogeneity of variances (i.e. variances approximately equal across groups) ("SPSS Tutorials," 2014). All required assumptions were met to run the One-Way ANOVA test. For example, as shown previously in the normality analysis, both dimensions of disengagement and exhaustion met the criteria for normality and the results for the homogeneity of variance test are shown in Table 12. The p-values for the test of homogeneity of variances was 0.426 for Disengagement and 0.622 for Exhaustion. Since the p-value is greater than 0.05 for this test, we met the assumption that the variances are equal.

Table 13. Homogeneity of Variances for Hypothesis 1

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Disengagement	.967	4	230	.426
Exhaustion	.658	4	230	.622

For the purpose of this research study, a p-value of 0.05 or less will be deemed statistically significant and therefore, the null hypothesis will be rejected. The p-value indicates the probability that the null hypothesis is correct and that there are no significant differences between the means of the groups (Patten, 2009). The p-value for the "Disengagement" dimension was 0.348 and 0.054 for "Exhaustion," as shown in Table 13. The results were not statistically significant and the null hypothesis was accepted for this research hypothesis, indicating that there is no statistically significant difference in the levels of disengagement or exhaustion among the different job types.

Even though the results lack statistical significance, by observing the mean value for each group's exhaustion (Table 14 and Figure 4) we can see that officers currently serving in the Cost Analysis portion of the career field report being the least exhausted (mean value = 4.2813), while officers serving in CPTS roles report being the most exhausted (mean value = 3.6366). Additionally, officers serving in Acquisition Budget roles report being the most disengaged (mean value = 3.3915), while officers serving in MAJCOM/Air Staff roles report being the most engaged (mean value = 3.8690).

Table 14. SPSS ANOVA Output for Hypothesis 1

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Disengagement	Between Groups	5.330	4	1.333	1.119	.348
	Within Groups	273.804	230	1.190		
	Total	279.135	234			
Exhaustion	Between Groups	9.261	4	2.315	2.360	.054
	Within Groups	225.608	230	.981		
	Total	234.869	234			

Table 15. Descriptive Output for Hypothesis 1

Descriptives

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Disengagement	ACQ BUDGET	27	3.3915	1.12806	.21709	2.9453	3.8378	1.43	5.57
	COST	28	3.7041	.97584	.18442	3.3257	4.0825	1.71	5.57
	OTHER	46	3.6677	.98333	.14498	3.3757	3.9597	1.71	5.71
	CPTS	86	3.8472	1.14176	.12312	3.6024	4.0920	1.29	6.00
	MAJCOM/AIR STAFF	48	3.8690	1.13632	.16401	3.5391	4.1990	1.00	6.00
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	CPTS	86	3.6366	1.07506	.11593	3.4061	3.8671	1.50	6.00
	OTHER	46	3.7663	.87821	.12949	3.5055	4.0271	2.00	5.50
	MAJCOM/AIR STAFF	48	3.7917	.98774	.14257	3.5049	4.0785	1.00	6.00
	ACQ BUDGET	27	3.9259	.95024	.18287	3.5500	4.3018	1.50	5.50
	COST	28	4.2813	.92960	.17568	3.9208	4.6417	2.88	6.00
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00

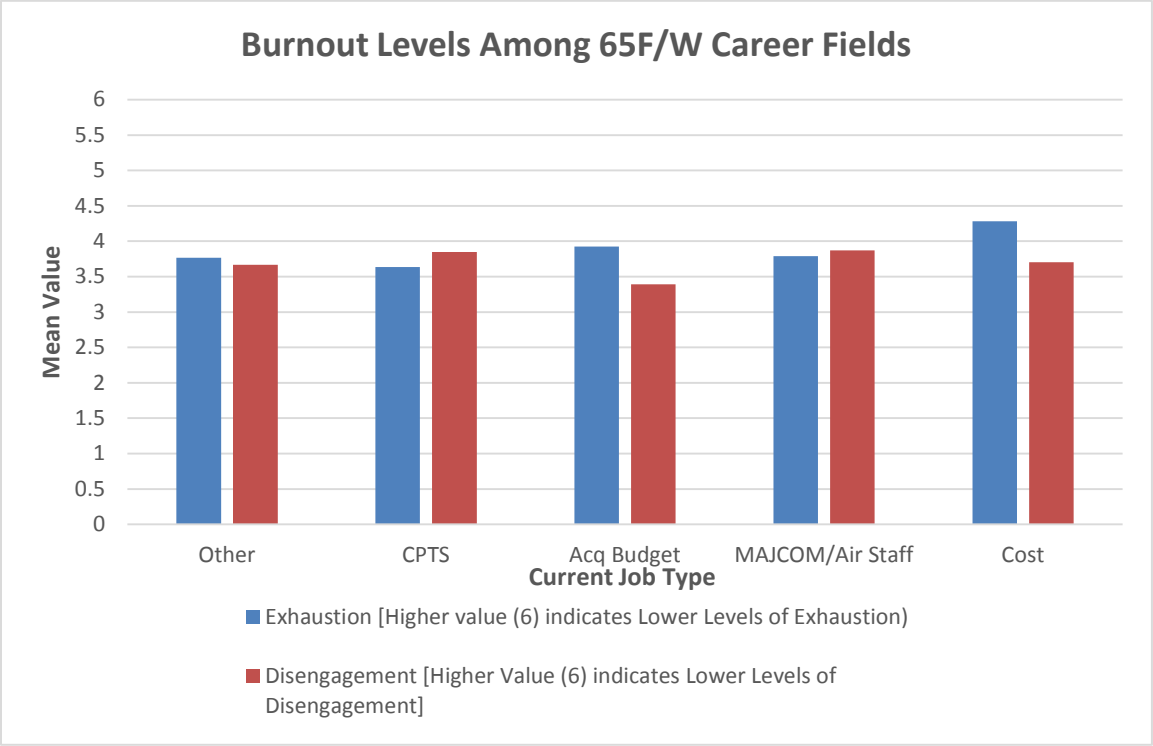

Figure 4. Mean Values of Burnout Dimensions Among Different Job Types

Hypothesis Test #2:

H2: Organizational commitment will be negatively related to turnover intentions.

$H2_0$: There is no relationship between organizational commitment and turnover intentions.

In order to test Hypothesis 2, the research team conducted a bivariate Pearson correlation test in SPSS on the variables of Organizational Commitment (OCQ) and Turnover Intentions (TIS). The Pearson product-moment correlation coefficient, *r*, was examined after running the bivariate correlation test in SPSS. It examines the strength of a linear association between two variables by "attempting to draw a line of best fit through the data of two variables" and the coefficient *r* indicates how far away all of the

data points are from the line of best fit ("Pearson Product-Moment Correlation," 2013). The Pearson correlation coefficient can take a range of values from +1 to -1 (Table 15) and its associated correlation strength is shown in Table 16 ("SPSS Tutorials", 2014).

Table 16. Pearson Correlation Coefficient r Interpretation

Value of *r*	Association	Interpretation
Zero	None	None
Greater than 1	Positive	As the value of one variable increases, so does the value of the other variable
Less than 1	Negative	As the value of one variable decreases, so does the value of the other variable

Table 17. Correlation Strength of r

Range of *r* values	Strength
$0.1 < \lvert r \rvert < 0.3$	Small/Weak Correlation
$0.3 < \lvert r \rvert < 0.5$	Medium/Moderate Correlation
$0.5 < \lvert r \rvert$	Large/Strong Correlation

The following assumptions must be met when using the Pearson's correlation coefficient: 1) the variables must be continuous, 2) the variables must be approximately normally distributed, and 3) there must be homogeneity of variances ("Pearson Product-Moment Correlation," 2013). All required assumptions were met to run the test, and the Pearson correlation coefficient value was calculated to be -0.708 (Table 17). This indicates that there is a statistically significant, strong negative association between organizational commitment and turnover intentions; the research hypothesis was accepted. The research team can conclude that the higher levels of organizational commitment possessed by an officer, the lower the levels of an officer's desire to separate. Fifteen items in the survey instrument measured organizational commitment. Some of the items that senior FM leaders may be able to focus on in order to increase

organizational commitment include: "*Often, I find it difficult to agree with this organization's policies on important matters relating to its employees*" and "*I would accept almost any assignment in order to keep working for this organization.*" Other items such as "*I find that my values align very similarly with the Air Force's values*" are more difficult for senior FM leaders to influence.

Table 18. SPSS Bivariate Pearson Correlation Output for Hypothesis 2

Correlations

		OCQ	TIS
OCQ	Pearson Correlation	1	-.708**
	Sig. (2-tailed)		.000
	N	251	251
TIS	Pearson Correlation	-.708**	1
	Sig. (2-tailed)	.000	
	N	251	274

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

Hypothesis Test #3:

H3: AFIT GCA graduates report higher levels of perceived availability of job alternatives than their non-AFIT peers.

$H3_0$: AFIT GCA graduates report the same levels of perceived availability of job alternatives than their non-AFIT peers.

In order to test Hypothesis 3, a One-Way ANOVA test (similar to Hypothesis 1) was conducted on each dimension of the EOI construct and whether or not the respondent indicated that they were currently in the GCA program or have already completed the GCA program (question 69 of the survey). The p-values were as follows: "Ease of Movement" dimension = 0.550, "Desirability of Movement" = 0.977, "Networking" = 0.937, "Crystallization of Alternatives" = 0.494, and "Mobility" = 0.948 (Table 18). The

results were not statistically significant and the null hypothesis was accepted for this research hypothesis, indicating that there is no significant difference in the levels of perceived availability of job alternatives when comparing AFIT graduates and non-AFIT graduates. The descriptive statistics for this test can be found in Appendix G, and the results will be discussed in further detail in Chapter V.

Table 19. SPSS ANOVA Output for Hypothesis 3

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
EaseofMovement	Between Groups	.244	1	.244	.358	.550
	Within Groups	158.837	233	.682		
	Total	159.081	234			
DesirabilityofMovement	Between Groups	.001	1	.001	.001	.977
	Within Groups	354.230	233	1.520		
	Total	354.232	234			
Networking	Between Groups	.008	1	.008	.006	.937
	Within Groups	278.810	233	1.197		
	Total	278.818	234			
CrystallizationofAlt	Between Groups	.876	1	.876	.469	.494
	Within Groups	434.798	233	1.866		
	Total	435.674	234			
Mobility	Between Groups	.005	1	.005	.004	.948
	Within Groups	192.276	177	1.086		
	Total	192.281	178			

Post-Hoc Analyses

In this section, the research team looks at various demographic factors to determine how they may influence a 65Fx/65Wx officer. Current assignment location, rank, deployment experience, and job type are some of the factors that are analyzed.

Impact of Job Type on Retirement Goals

The relationship between the job type that the officer has spent his or her majority of time serving in and his or her desire to serve in the active duty Air Force until

retirement (at least 20 years) was analyzed by conducting a One-Way ANOVA test. The One-Way ANOVA test was conducted on the respondents' answers to Item 64 ("In regards to your career, up-to-date, which field have you spent the majority of your career working in?") and Item 7 ("I aim to serve at least 20 years in the active duty Air Force") of the online survey. The research team excluded respondents who indicated that they have already served for 20 or more years from this analysis.

The results of the One-Way ANOVA were not significant and resulted in a p-value of 0.733 (Table 19). Therefore, it can be stated that there is no statistically significant difference between the job type that the officer spends his/her majority of time serving in and his/her goal of serving for at least 20 years in the active duty Air Force. However, there is a slight difference in the means between the job types, as shown in Table 20. Officers who have spent the majority of their career in Acquisition Budget jobs expressed the lowest desire to serve for at least 20 years (mean = 2.67), while officers who identified as "Other" expressed the highest desire to serve for at least 20 years (mean = 2.08). A value of "2" is equivalent to a respondent stating that they "moderately agree" with the intention to serve for 20 years, while a value of "3" means that they "slightly agree" to serve 20 years. With a mean value of 2.67 for the officers that serve in Acquisition Budget jobs, it can be stated that these officers lean towards "slightly agreeing" to serve for 20 years and that they are most likely undecided on their long-term career goals. Officers who identify as serving in the "Other" category (e.g. cross-trained from a different AFSC, Instructor/Student Duty) appear set on serving for a full 20-year Air Force career since they lean toward "moderately agreeing."

Table 20. SPSS One-Way ANOVA Output for Job Type & Retirement Goal

Retirement Goal

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.534	3	1.178	.428	.733
Within Groups	534.329	194	2.754		
Total	537.864	197			

Table 21. SPSS Descriptive Output for Job Type & Retirement Goal

Retirement Goal

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
OTHER	12	2.08	1.564	.452	1.09	3.08
O&M	136	2.37	1.614	.138	2.09	2.64
ACQ BUDGET	24	2.67	1.903	.389	1.86	3.47
COST	26	2.54	1.702	.334	1.85	3.23
Total	198	2.41	1.652	.117	2.18	2.64

NOTE: Value of 1 = Strongly Agree; 2 = Moderately Agree; 3 = Slightly Agree; 4 = Slightly Disagree; 5 = Moderately Disagree; 6 = Strongly Disagree to serve for at least 20 years in the active duty Air Force

Impact of Reaching the "Half-Way" Mark on Retirement Goals

The relationship between an officer's time in service and his/her goal to serve until retirement was analyzed a One-Way ANOVA test. Specifically, the test was conducted on two categorical groups to see if reaching the "half-way" to retirement mark (10 years of service) impacted the officer's desire to serve for at least 20 years. In order to conduct this test, dummy variables were used to create two groups of officers (one group that has served for more than 10 years and one group that has served for less 10 years or less). The independent variable for this test was the dummy variable, and the dependent variable was Item 7 of the survey ("I aim to serve at least 20 years in the active duty Air Force"). Officers who have already served for 20 or more years were excluded from this test.

The p-value for this test was less than 0.05 (Table 21), proving to be statistically significant. This means that there exists a difference in the retirement goals of officers who have served for more than 10 years and officers who have served for 10 years or less. By examining the mean values (Table 22), officers with 10 years or less of service express a lower desire of serving for at least 20 years (mean = 2.91) than officers who have served for more than 10 years (mean = 1.46). Additionally, zero officers within the group that has served for more than 10 years chose to respond with the answer "Strongly Disagree."

Table 22. SPSS One-Way ANOVA Output for Time-In-Service & Retirement Goal

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Retirement Goal	Between Groups	94.104	1	94.104	41.564	.000
	Within Groups	443.760	196	2.264		
	Total	537.864	197			

Table 23. SPSS Descriptive Output for Time-In-Service & Retirement Goal

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Retirement Goal	<10 Yrs	130	2.91	1.750	.153	2.60	3.21	1	6
	≥10 Yrs	68	1.46	.854	.104	1.25	1.66	1	5
	Total	198	2.41	1.652	.117	2.18	2.64	1	6

NOTE: Value of 1 = Strongly Agree; 2 = Moderately Agree; 3 = Slightly Agree; 4 = Slightly Disagree; 5 = Moderately Disagree; 6 = Strongly Disagree to serve for at least 20 years in the active duty Air Force

The research team also tested different time-in-service marks to determine the break-year for turnover intentions. We found that a statistical significance exists once an officer has served for eight or more years. That is, there is a statistically significant

difference in the turnover intentions of officers who have served for eight or more years compared to officers who have not yet served for eight years (Table 23). This finding suggests that once an officer reaches eight years of service, he/she is more likely to stay in the Air Force for the long haul.

Table 24. SPSS One-Way ANOVA Output for Turnover Intentions & 8 or More Years of Time in Service

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	2.843	1	2.843	4.138	.043
	Within Groups	160.075	233	.687		
	Total	162.918	234			

Table 25. SPSS Descriptive Output for Turnover Intentions & 8 or More Years of Time in Service

Descriptives

		N	Mean	Std. Dev	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	<8 years	113	3.0767	.76734	.07219	2.9337	3.2197	1.50	4.67
	8 or more	122	2.8566	.88200	.07985	2.6985	3.0146	1.00	4.83
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83

Impact of Current Location on Turnover Intentions, Organizational Commitment, and Burnout

The research team also analyzed the relationship between an officer's current assignment location and his/her turnover intentions, organizational commitment, burnout, and perceived availability of job alternatives. Figure 5 shows the distribution of officers. In order to test these various relationships, a One-Way ANOVA was conducted for each

test. The dependent variable was the construct or dimension of the construct and the independent variable was the respondent's answer to Item 66 of the survey ("Are you currently stationed in any of the following locations: Hanscom AFB, Los Angeles AFB, the DC area, or Wright Patterson AFB? If so, please specify which location."). The research team chose to single out the specified bases because the majority of Acquisition Budget and Cost Analysis jobs are assigned to those locations. The research team wanted to explore whether or not an officer's assignment to one of these locations impacts the chances of the officer deciding to separate from the Air Force.

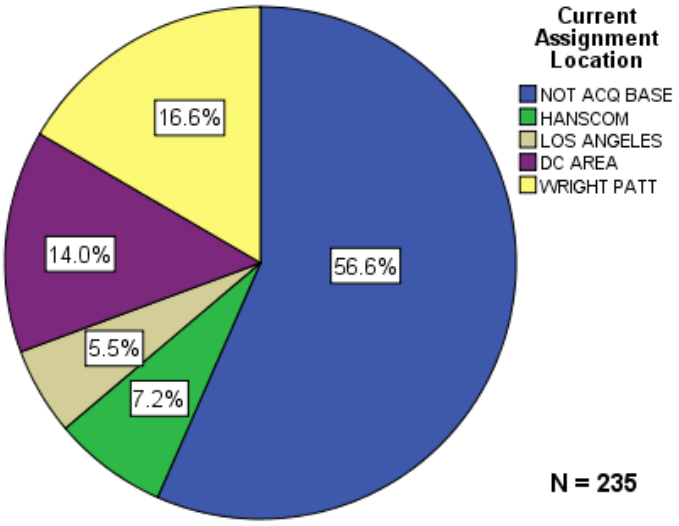

Figure 5. Current Assignment Locations

The tests that proved to be statistically significant were disengagement (p-value = 0.044), exhaustion (p-value = 0.022), and crystallization of alternatives (p-value = 0.021) (Table 25). Officers in the DC area reported being the least exhausted (mean value = 4.1742) and most engaged in their work (mean value = 4.1039), while officers at Hanscom Air Force Base reported being the most disengaged (mean value = 3.2353) and officers who were at "Other" locations (e.g. overseas bases, the majority of base-level

and MAJCOM FM jobs) were the most exhausted (mean value = 3.6222) (Figure 6 and Table 26). In regards to crystallization of alternatives (Items 49 and 50 of the survey), officers in Los Angeles reported the highest mean value (3.3846), while officers at "Other" locations reported the lowest mean value (2.1090) (Table 26). In other words, the value of 3.3846 reveals that officers in Los Angeles leaned towards "Slightly Disagree" and the value of 2.1090 reveals that officers in "Other" locations leaned towards "Moderately Disagree" when presented with the statements: "*Right now, I have a job offer 'on the table' from outside of the active duty Air Force, if I choose to take it*" and "*I have found a better alternative than my present job*." These findings suggest that officers in Los Angeles are more susceptible to seek civilian employment than their peers stationed in other locations. These officers in Los Angeles also reported the highest mean value for Desirability of Movement and second highest mean value for both turnover intentions and Networking. It can be inferred that officers in Los Angeles tend to view civilian employment as more favorable than their Air Force jobs, have contacts that can assist with finding civilian employment, and have a higher likelihood of turnover than officers stationed elsewhere (except when compared to officers currently stationed at Hanscom AFB who report the highest mean value for turnover intentions).

Table 26. SPSS One-Way ANOVA Output for Current Locations

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	3.585	4	.896	1.294	.273
	Within Groups	159.333	230	.693		
	Total	162.918	234			
OCQ	Between Groups	3.714	4	.929	1.270	.282
	Within Groups	168.141	230	.731		
	Total	171.855	234			
Disengagement	Between Groups	11.567	4	2.892	2.486	.044
	Within Groups	267.568	230	1.163		
	Total	279.135	234			
Exhaustion	Between Groups	11.357	4	2.839	2.922	.022
	Within Groups	223.512	230	.972		
	Total	234.869	234			
EaseofMovement	Between Groups	5.824	4	1.456	2.185	.071
	Within Groups	153.257	230	.666		
	Total	159.081	234			
DesirabilityofMovement	Between Groups	10.345	4	2.586	1.730	.144
	Within Groups	343.887	230	1.495		
	Total	354.232	234			
Networking	Between Groups	10.299	4	2.575	2.205	.069
	Within Groups	268.519	230	1.167		
	Total	278.818	234			
CrystallizationofAlt	Between Groups	21.255	4	5.314	2.949	.021
	Within Groups	414.420	230	1.802		
	Total	435.674	234			
Mobility	Between Groups	2.333	4	.583	.534	.711
	Within Groups	189.947	174	1.092		
	Total	192.281	178			

Table 27. SPSS Descriptive Statistics for Current Locations

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	OTHER	133	2.9449	.88495	.07673	2.7931	3.0967	1.00	4.83
	HANSCOM	17	3.2843	.60600	.14698	2.9727	3.5959	2.17	4.00
	LOS ANGELES	13	3.2308	.67199	.18638	2.8247	3.6368	2.17	4.67
	DC AREA	33	2.8081	.85200	.14831	2.5060	3.1102	1.67	4.50
	WRIGHT PATT	39	2.9231	.75107	.12027	2.6796	3.1665	1.50	4.17
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83
OCQ	OTHER	133	4.4366	.89516	.07762	4.2831	4.5901	1.67	5.80
	HANSCOM	17	4.3412	.73025	.17711	3.9657	4.7166	2.87	5.53
	LOS ANGELES	13	4.2769	.77117	.21388	3.8109	4.7429	2.33	5.20
	DC AREA	33	4.7354	.78093	.13594	4.4584	5.0123	2.67	5.67
	WRIGHT PATT	39	4.3470	.84579	.13544	4.0728	4.6212	2.73	5.93
	Total	235	4.4479	.85699	.05590	4.3378	4.5581	1.67	5.93
Disengagement	OTHER	133	3.7905	1.10329	.09567	3.6013	3.9798	1.00	6.00
	HANSCOM	17	3.2353	1.11225	.26976	2.6634	3.8072	1.71	5.57
	LOS ANGELES	13	3.3187	1.10834	.30740	2.6489	3.9884	1.43	5.00
	DC AREA	33	4.1039	1.00272	.17455	3.7483	4.4594	2.14	6.00
	WRIGHT PATT	39	3.6630	1.02832	.16466	3.3297	3.9963	1.71	5.57
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	OTHER	133	3.6222	1.02473	.08885	3.4464	3.7979	1.00	6.00
	HANSCOM	17	4.0441	.94056	.22812	3.5605	4.5277	2.25	5.50
	LOS ANGELES	13	3.8269	1.09870	.30472	3.1630	4.4909	1.50	6.00
	DC AREA	33	4.1742	.97975	.17055	3.8268	4.5216	2.38	6.00
	WRIGHT PATT	39	3.9968	.81992	.13129	3.7310	4.2626	2.00	5.50
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00
EaseofMovement	OTHER	133	5.1654	.82534	.07157	5.0238	5.3070	2.00	6.00
	HANSCOM	17	5.0392	.94929	.23024	4.5511	5.5273	3.00	6.00
	LOS ANGELES	13	4.9231	.80684	.22378	4.4355	5.4106	4.00	6.00
	DC AREA	33	5.4545	.60563	.10543	5.2398	5.6693	4.00	6.00
	WRIGHT PATT	39	4.9316	.87919	.14078	4.6466	5.2166	2.33	6.00
	Total	235	5.1447	.82452	.05379	5.0387	5.2506	2.00	6.00
DesirabilityofMovement	OTHER	133	3.7719	1.25621	.10893	3.5565	3.9874	1.00	6.00
	HANSCOM	17	4.2745	1.37050	.33239	3.5699	4.9792	1.00	6.00
	LOS ANGELES	13	4.3590	1.09258	.30303	3.6987	5.0192	2.67	6.00
	DC AREA	33	3.8485	1.12759	.19629	3.4487	4.2483	1.67	6.00
	WRIGHT PATT	39	3.5556	1.15301	.18463	3.1818	3.9293	1.33	6.00
	Total	235	3.8156	1.23037	.08026	3.6575	3.9737	1.00	6.00
Networking	OTHER	133	4.0727	1.03584	.08982	3.8950	4.2504	1.67	6.00
	HANSCOM	17	4.0392	1.42830	.34641	3.3049	4.7736	1.00	6.00
	LOS ANGELES	13	4.0769	.98276	.27257	3.4830	4.6708	2.67	6.00
	DC AREA	33	4.4848	1.02433	.17831	4.1216	4.8481	2.00	6.00
	WRIGHT PATT	39	3.7265	1.13651	.18199	3.3581	4.0949	1.00	5.67
	Total	235	4.0709	1.09157	.07121	3.9306	4.2112	1.00	6.00
CrystallizationofAlt	OTHER	133	2.1090	1.29880	.11262	1.8862	2.3318	1.00	6.00
	HANSCOM	17	2.3529	1.56888	.38051	1.5463	3.1596	1.00	6.00
	LOS ANGELES	13	3.3846	1.38675	.38462	2.5466	4.2226	1.00	5.50
	DC AREA	33	2.4242	1.44763	.25200	1.9109	2.9376	1.00	6.00
	WRIGHT PATT	39	2.1154	1.27971	.20492	1.7006	2.5302	1.00	5.50
	Total	235	2.2426	1.36450	.08901	2.0672	2.4179	1.00	6.00
Mobility	OTHER	105	5.1048	1.00778	.09835	4.9097	5.2998	2.00	6.00
	HANSCOM	11	5.3636	.94815	.28588	4.7267	6.0006	3.00	6.00
	LOS ANGELES	7	5.5238	.71640	.27077	4.8613	6.1864	4.33	6.00
	DC AREA	27	4.9877	1.38823	.26717	4.4385	5.5368	1.00	6.00
	WRIGHT PATT	29	5.0805	.88933	.16515	4.7422	5.4187	2.67	6.00
	Total	179	5.1155	1.03934	.07768	4.9622	5.2688	1.00	6.00

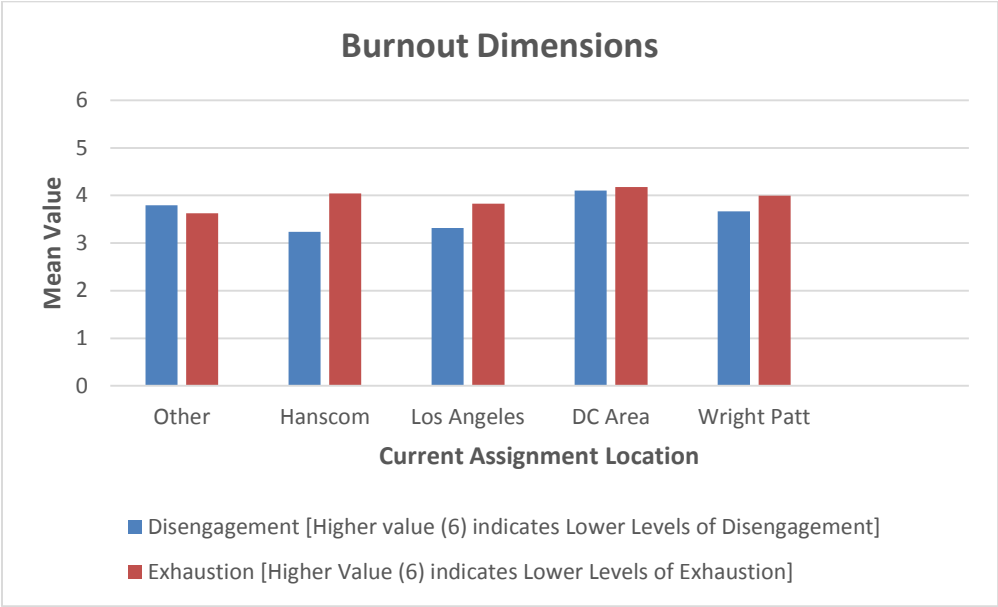

Figure 6. Burnout Based on Current Location

Impact of Deployments on Turnover Intentions, Organizational Commitment, and Burnout

The research team conducted One-Way ANOVA tests to analyze the impact of deployments on an officer's turnover intentions, organizational commitment, and burnout. The dependent variable was the construct or dimension of the construct and the independent variable was the respondent's answer to Item 68 of the survey ("Have you completed any deployments?"). The distribution of deployments is shown in Figure 7.

Turnover intentions (p-value = 0.049) and disengagement (p-value = 0.003) proved to be statistically significant (Table 27). Officers who have deployed at least once reported slightly *lower* intentions of separating from the Air Force (mean value = 2.8694) than their peers who have not deployed (mean value = 3.0858) (Table 28). Additionally, officers who have deployed reported being more engaged (mean value = 3.9307) than

officers who have not deployed (mean value = 3.5035) (Table 28). These findings will be discussed further in Chapter V.

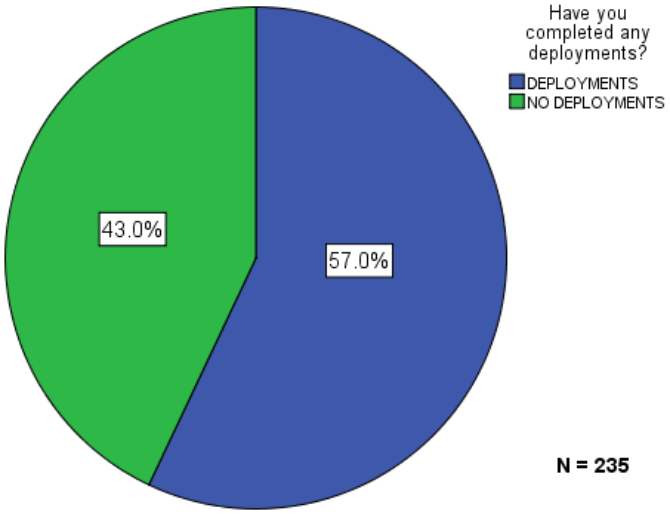

Figure 7. Deployment Distribution

Table 28. SPSS One-Way ANOVA Output for Deployments

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	2.697	1	2.697	3.922	.049
	Within Groups	160.221	233	.688		
	Total	162.918	234			
OCQ	Between Groups	1.822	1	1.822	2.496	.115
	Within Groups	170.034	233	.730		
	Total	171.855	234			
Disengagement	Between Groups	10.509	1	10.509	9.115	.003
	Within Groups	268.626	233	1.153		
	Total	279.135	234			
Exhaustion	Between Groups	.104	1	.104	.103	.748
	Within Groups	234.764	233	1.008		
	Total	234.869	234			

Table 29. SPSS Descriptive Output for Deployments

Descriptives

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	DEPLOYMENTS	134	2.8694	.84919	.07336	2.7243	3.0145	1.00	4.83
	NO DEPLOYMENTS	101	3.0858	.80195	.07980	2.9275	3.2441	1.00	4.67
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83
OCQ	DEPLOYMENTS	134	4.5244	.85784	.07411	4.3778	4.6710	1.67	5.80
	NO DEPLOYMENTS	101	4.3465	.84947	.08453	4.1788	4.5142	1.93	5.93
	Total	235	4.4479	.85699	.05590	4.3378	4.5581	1.67	5.93
Disengagement	DEPLOYMENTS	134	3.9307	1.07101	.09252	3.7477	4.1137	1.00	6.00
	NO DEPLOYMENTS	101	3.5035	1.07733	.10720	3.2909	3.7162	1.29	6.00
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	DEPLOYMENTS	134	3.7854	1.01082	.08732	3.6127	3.9582	1.00	6.00
	NO DEPLOYMENTS	101	3.8280	.99434	.09894	3.6317	4.0243	1.50	6.00
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00

Impact of Gender on Turnover Intentions, Organizational Commitment, and Burnout

An analysis of variance test was conducted to determine if any significant differences existed between genders in regards to turnover intentions, organizational commitment, and burnout. The distribution of the genders is displayed in Figure 8. The only dimension that proved to be statistically significant was exhaustion (Table 29). Female officers reported being slightly more exhausted (mean value = 3.5482) than their male counterparts (mean value = 3.8855) (Table 30).

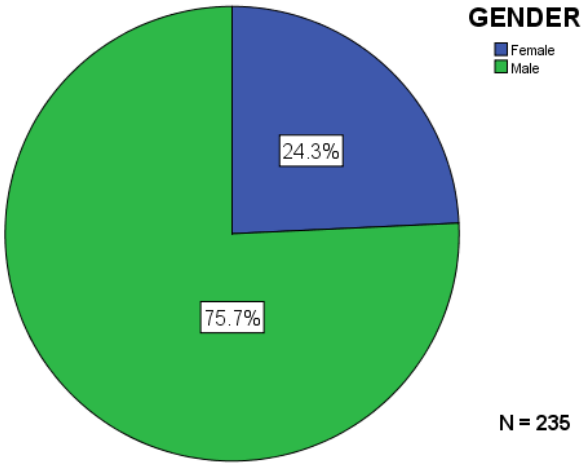

Figure 8. Gender Distribution

Table 30. SPSS One-Way ANOVA Output for Gender

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	.080	1	.080	.114	.736
	Within Groups	162.838	233	.699		
	Total	162.918	234			
OCQ	Between Groups	.003	1	.003	.004	.953
	Within Groups	171.853	233	.738		
	Total	171.855	234			
Disengagement	Between Groups	.011	1	.011	.009	.923
	Within Groups	279.123	233	1.198		
	Total	279.135	234			
Exhaustion	Between Groups	4.912	1	4.912	4.977	.027
	Within Groups	229.957	233	.987		
	Total	234.869	234			

Table 31. SPSS Descriptive Output for Gender

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	Female	57	2.9298	.80545	.10669	2.7161	3.1435	1.00	4.17
	Male	178	2.9728	.84542	.06337	2.8478	3.0979	1.00	4.83
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83
OCQ	Female	57	4.4538	.83954	.11120	4.2310	4.6766	2.73	5.93
	Male	178	4.4461	.86483	.06482	4.3181	4.5740	1.67	5.80
	Total	235	4.4479	.85699	.05590	4.3378	4.5581	1.67	5.93
Disengagement	Female	57	3.7594	1.16876	.15481	3.4493	4.0695	1.29	6.00
	Male	178	3.7432	1.06995	.08020	3.5849	3.9014	1.00	6.00
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	Female	57	3.5482	1.01131	.13395	3.2799	3.8166	1.50	5.50
	Male	178	3.8855	.98773	.07403	3.7394	4.0316	1.00	6.00
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00

Impact of Marital Status on Turnover Intentions, Organizational Commitment, and Burnout

The research team analyzed the relationship between an officer's marital status and his/her turnover intentions, organizational commitment, and burnout by conducting a One-Way ANOVA test. The distribution of officers is shown in Figure 9. Turnover intentions (p-value = 0.030) and disengagement (p-value = 0.001) proved to be statistically significant (Table 31). Officers who indicated being divorced reported the lowest turnover intentions (mean value = 2.7333) and being the most engaged in their

work (mean value = 4.3143) (Table 32). Although the test results were not statistically significant, divorced officers also reported the highest levels of organizational commitment (mean value = 4.6333). Single officers expressed the highest turnover intentions (mean value = 3.1927) and being the most disengaged (mean value = 3.3549). However, the Air Force cannot control an officer's marital status and therefore, senior leaders should not focus on the findings associated with this demographic category.

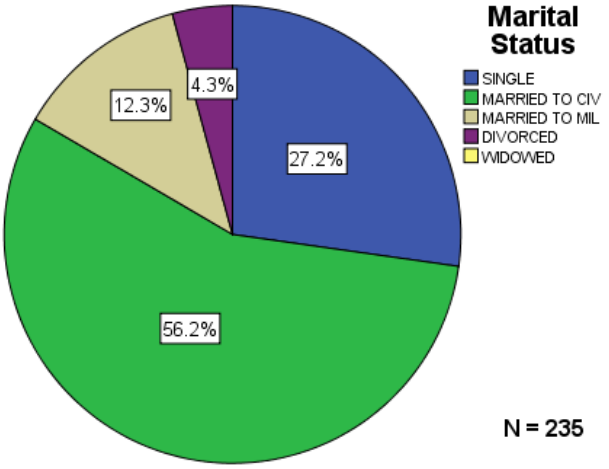

Figure 9. Marital Status Distribution

Table 32. SPSS One-Way ANOVA Output for Marital Status

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	6.153	3	2.051	3.022	.030
	Within Groups	156.765	231	.679		
	Total	162.918	234			
OCQ	Between Groups	3.062	3	1.021	1.397	.244
	Within Groups	168.793	231	.731		
	Total	171.855	234			
Disengagement	Between Groups	19.753	3	6.584	5.864	.001
	Within Groups	259.382	231	1.123		
	Total	279.135	234			
Exhaustion	Between Groups	4.294	3	1.431	1.434	.234
	Within Groups	230.575	231	.998		
	Total	234.869	234			

Table 33. SPSS Descriptive Output for Marital Status

Descriptives

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Min	Max
TIS	SINGLE	64	3.1927	.75547	.09443	3.0040	3.3814	1.67	4.67
	MARRIED TO CIV	132	2.8434	.84678	.07370	2.6976	2.9892	1.00	4.83
	MARRIED TO MIL	29	3.0747	.76192	.14149	2.7849	3.3645	1.83	4.83
	DIVORCED	10	2.7333	1.08639	.34355	1.9562	3.5105	1.00	4.17
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83
OCQ	SINGLE	64	4.2885	.82236	.10279	4.0831	4.4940	1.73	5.93
	MARRIED TO CIV	132	4.5298	.87604	.07625	4.3790	4.6806	1.67	5.80
	MARRIED TO MIL	29	4.3632	.71793	.13332	4.0901	4.6363	3.13	5.47
	DIVORCED	10	4.6333	1.11654	.35308	3.8346	5.4321	2.80	5.67
	Total	235	4.4479	.85699	.05590	4.3378	4.5581	1.67	5.93
Disengagement	SINGLE	64	3.3549	.99789	.12474	3.1056	3.6042	1.29	5.29
	MARRIED TO CIV	132	3.9448	1.07118	.09323	3.7604	4.1292	1.29	6.00
	MARRIED TO MIL	29	3.5172	1.08153	.20083	3.1059	3.9286	1.00	5.29
	DIVORCED	10	4.3143	1.22853	.38850	3.4354	5.1931	2.43	6.00
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	SINGLE	64	3.6445	1.06654	.13332	3.3781	3.9109	1.50	6.00
	MARRIED TO CIV	132	3.9186	.92554	.08056	3.7592	4.0779	1.50	6.00
	MARRIED TO MIL	29	3.6250	1.14272	.21220	3.1903	4.0597	1.00	5.75
	DIVORCED	10	3.8250	1.06099	.33551	3.0660	4.5840	2.25	5.75
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00

Impact of Commissioning Source on Turnover Intentions, Organizational Commitment, Burnout, Perceived Availability of Job Alternatives, and Job Hunt Intentions

The impact of commissioning source on the following constructs was tested by conducting a One-Way ANOVA test: turnover intentions organizational commitment, burnout, and perceived availability of job alternatives. Figure 10 represents the distribution of the commissioning sources. Turnover intentions (p-value = 0.005),

organizational commitment (p-value = 0.026), disengagement (p-value = 0.000), and desirability of movement (p-value = 0.038) all proved to be statistically significant (Table 33). Officers who indicated commissioning through the Air Force Academy reported the highest likelihood of turnover (mean value = 3.2126), lowest organizational commitment (mean value = 4.2164), highest level of disengagement (mean value = 3.2650), and highest score for desirability of movement (mean value = 4.1304) (Table 34). Conversely, officers who commissioned via ROTC reported the lowest likelihood of turnover (mean value = 2.7879), highest level of organizational commitment (mean value = 4.5663), lowest level of disengagement (mean value = 4.0664), and lowest score for desirability of movement (mean value = 3.6498). These findings will be discussed further in Chapter V.

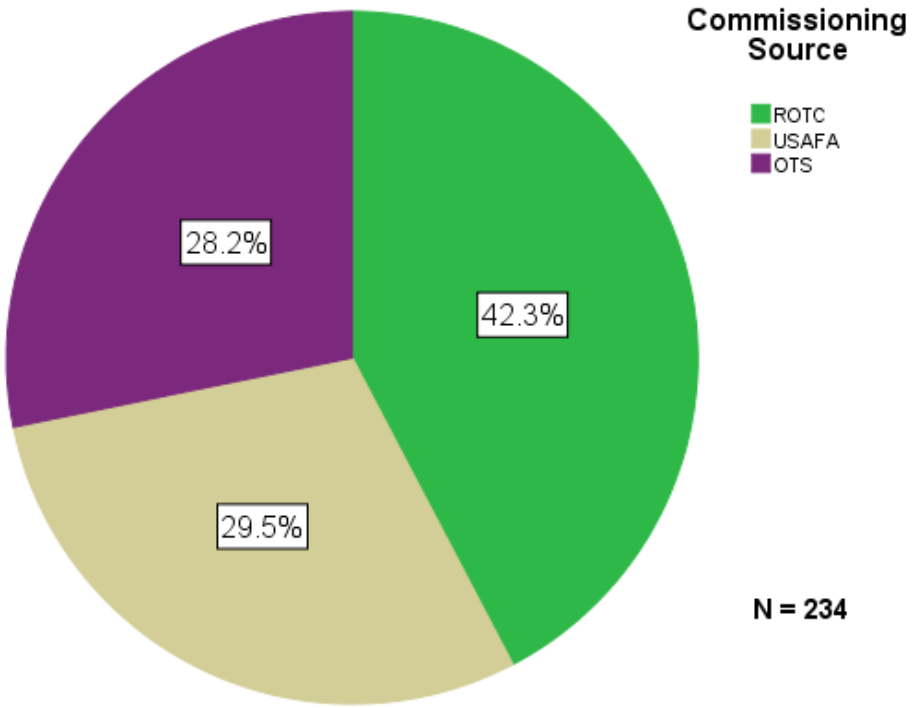

Figure 10. Commissioning Source Distribution

Table 34. SPSS One-Way ANOVA Output for Commissioning Source

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	7.338	2	3.669	5.462	.005
	Within Groups	155.183	231	.672		
	Total	162.521	233			
OCQ	Between Groups	5.333	2	2.666	3.700	.026
	Within Groups	166.475	231	.721		
	Total	171.807	233			
Disengagement	Between Groups	26.146	2	13.073	11.951	.000
	Within Groups	252.697	231	1.094		
	Total	278.843	233			
Exhaustion	Between Groups	4.727	2	2.364	2.376	.095
	Within Groups	229.814	231	.995		
	Total	234.541	233			
EaseofMovement	Between Groups	.368	2	.184	.268	.765
	Within Groups	158.484	231	.686		
	Total	158.851	233			
DesirabilityofMovement	Between Groups	9.863	2	4.932	3.315	.038
	Within Groups	343.700	231	1.488		
	Total	353.564	233			
Networking	Between Groups	.995	2	.497	.415	.661
	Within Groups	276.956	231	1.199		
	Total	277.951	233			
CrystallizationofAlt	Between Groups	5.922	2	2.961	1.603	.203
	Within Groups	426.650	231	1.847		
	Total	432.573	233			
Mobility	Between Groups	1.278	2	.639	.588	.557
	Within Groups	190.216	175	1.087		
	Total	191.494	177			

Table 35. SPSS Descriptive Output for Commissioning Source

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	ROTC	99	2.7879	.75885	.07627	2.6365	2.9392	1.00	4.17
	USAFA	69	3.2126	.74584	.08979	3.0334	3.3917	1.50	4.67
	OTS	66	2.9722	.96812	.11917	2.7342	3.2102	1.17	4.83
	Total	234	2.9651	.83517	.05460	2.8575	3.0727	1.00	4.83
OCQ	ROTC	99	4.5663	.79991	.08039	4.4068	4.7259	1.67	5.80
	USAFA	69	4.2164	.88483	.10652	4.0039	4.4290	1.73	5.80
	OTS	66	4.5091	.88170	.10853	4.2923	4.7258	1.93	5.93
	Total	234	4.4470	.85870	.05614	4.3364	4.5576	1.67	5.93
Disengagement	ROTC	99	4.0664	1.00173	.10068	3.8666	4.2662	1.71	6.00
	USAFA	69	3.2650	.99376	.11963	3.0263	3.5037	1.29	5.29
	OTS	66	3.7641	1.15827	.14257	3.4793	4.0488	1.00	6.00
	Total	234	3.7448	1.09396	.07151	3.6039	3.8857	1.00	6.00
Exhaustion	ROTC	99	3.9634	.92034	.09250	3.7798	4.1469	1.50	6.00
	USAFA	69	3.6431	.97799	.11774	3.4082	3.8781	1.50	5.50
	OTS	66	3.7235	1.12158	.13806	3.4478	3.9992	1.00	5.75
	Total	234	3.8013	1.00330	.06559	3.6721	3.9305	1.00	6.00
EaseofMovement	ROTC	99	5.1347	.76919	.07731	4.9813	5.2881	2.00	6.00
	USAFA	69	5.1063	.77648	.09348	4.9197	5.2928	3.67	6.00
	OTS	66	5.2071	.95678	.11777	4.9719	5.4423	2.33	6.00
	Total	234	5.1467	.82569	.05398	5.0404	5.2531	2.00	6.00
DesirabilityofMovement	ROTC	99	3.6498	1.16192	.11678	3.4181	3.8816	1.00	6.00
	USAFA	69	4.1304	1.13215	.13629	3.8585	4.4024	1.67	6.00
	OTS	66	3.7475	1.38250	.17017	3.4076	4.0873	1.00	6.00
	Total	234	3.8191	1.23184	.08053	3.6604	3.9777	1.00	6.00
Networking	ROTC	99	4.1111	1.14781	.11536	3.8822	4.3400	1.33	6.00
	USAFA	69	3.9662	1.03870	.12505	3.7167	4.2157	1.00	6.00
	OTS	66	4.1061	1.07044	.13176	3.8429	4.3692	2.00	6.00
	Total	234	4.0670	1.09221	.07140	3.9263	4.2076	1.00	6.00
CrystallizationofAlt	ROTC	99	2.1566	1.24262	.12489	1.9087	2.4044	1.00	5.50
	USAFA	69	2.4783	1.43853	.17318	2.1327	2.8238	1.00	6.00
	OTS	66	2.0985	1.43907	.17714	1.7447	2.4523	1.00	6.00
	Total	234	2.2350	1.36255	.08907	2.0596	2.4105	1.00	6.00
Mobility	ROTC	74	5.0270	1.03037	.11978	4.7883	5.2657	1.00	6.00
	USAFA	46	5.2391	1.00287	.14786	4.9413	5.5369	2.67	6.00
	OTS	58	5.1149	1.08786	.14284	4.8289	5.4010	2.00	6.00
	Total	178	5.1105	1.04014	.07796	4.9566	5.2643	1.00	6.00

Additionally, a One-Way ANOVA was conducted to see if there was a significant difference between commissioning sources and an officer's intent to search for a civilian job within a few years of his/her active duty service commitment (Item 8 of the survey).

This test proved to be statistically significant (p-value = 0.008). As shown in Table 36 and Figure 7, officers who commissioned through the Air Force Academy reported the highest intentions of searching for a job upon reaching the end of their service commitments (mean value = 4.23), while ROTC graduates reported the lowest levels (mean value = 3.38).

Table 36. SPSS One-Way ANOVA Output for Job Hunt Intention

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Job Hunt Intention	Between Groups	29.261	2	14.631	4.889	.008
	Within Groups	691.234	231	2.992		
	Total	720.496	233			

Table 37. SPSS Descriptive Output for Job Hunt Intention

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Job Hunt Intention	ROTC	99	3.38	1.730	.174	3.04	3.73	1	6
	USAFA	69	4.23	1.610	.194	3.85	4.62	1	6
	OTS	66	3.71	1.846	.227	3.26	4.17	1	6
	Total	234	3.73	1.758	.115	3.50	3.95	1	6

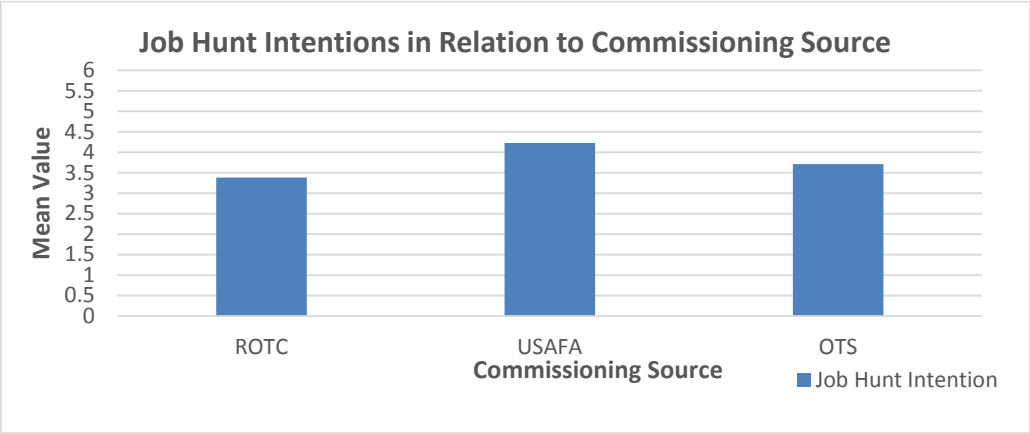

Figure 11. Job Hunt Intentions

Impact of Rank on Turnover Intentions, Org Commitment, and Burnout

The relationship between an officer's rank and his/her turnover intentions, organizational commitment, and burnout was analyzed by conducting a One-Way ANOVA test. Turnover intentions (p-value = 0.005), organizational commitment (p-value = 0.008), and disengagement (p-value = 0.000) proved to be statistically significant (Table 37). First lieutenants expressed the highest likelihood of turnover (mean value = 3.2237), lowest value of organizational commitment (mean value = 4.2474), and highest value of disengagement (mean value = 3.1842) (Table 38). Majors reported the highest level of organizational commitment (mean value = 4.8144) and lowest level of disengagement (mean value = 4.2548). Second lieutenants reported the lowest intent of separating from the Air Force and highest level of organizational commitment when compared to other CGOs (First Lieutenants and Captains). All ranks of FGOs reported more engagement with and more commitment to their work than CGOs. Lastly, even though the results were not statistically significant, first lieutenants reported being the most exhausted (mean value = 3.6349), followed by majors (mean value = 3.6486). Chapter V will discuss the implications of these findings.

Table 38. SPSS One-Way ANOVA Output for Rank

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
TIS	Between Groups	11.452	5	2.290	3.463	.005
	Within Groups	151.466	229	.661		
	Total	162.918	234			
OCQ	Between Groups	11.293	5	2.259	3.221	.008
	Within Groups	160.562	229	.701		
	Total	171.855	234			
Disengagement	Between Groups	28.957	5	5.791	5.301	.000
	Within Groups	250.177	229	1.092		
	Total	279.135	234			
Exhaustion	Between Groups	6.882	5	1.376	1.383	.232
	Within Groups	227.986	229	.996		
	Total	234.869	234			

Table 39. SPSS Descriptive Output for Rank

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
TIS	0-1	32	3.0469	.79451	.14045	2.7604	3.3333	1.67	4.50
	0-2	38	3.2237	.77234	.12529	2.9698	3.4775	1.50	4.67
	0-3	79	3.0865	.79388	.08932	2.9087	3.2643	1.00	4.83
	0-4	37	2.6532	.81780	.13445	2.3805	2.9258	1.17	4.50
	0-5	41	2.8130	.89458	.13971	2.5306	3.0954	1.17	4.83
	0-6	8	2.3542	.80887	.28598	1.6779	3.0304	1.00	3.33
	Total	235	2.9624	.83440	.05443	2.8552	3.0696	1.00	4.83
OCQ	0-1	32	4.4813	.87280	.15429	4.1666	4.7959	2.73	5.93
	0-2	38	4.2474	.79637	.12919	3.9856	4.5091	2.33	5.53
	0-3	79	4.2481	.84408	.09497	4.0590	4.4372	1.73	5.80
	0-4	37	4.8144	.75312	.12381	4.5633	5.0655	2.80	5.80
	0-5	41	4.6163	.90662	.14159	4.3301	4.9024	1.67	5.80
	0-6	8	4.6833	.81162	.28695	4.0048	5.3619	3.33	5.67
	Total	235	4.4479	.85699	.05590	4.3378	4.5581	1.67	5.93
Disengagement	0-1	32	3.5134	1.09271	.19317	3.1194	3.9074	1.71	5.57
	0-2	38	3.1842	.91317	.14814	2.8841	3.4844	1.29	4.86
	0-3	79	3.6781	1.09000	.12263	3.4340	3.9223	1.00	6.00
	0-4	37	4.2548	.99667	.16385	3.9225	4.5871	2.00	6.00
	0-5	41	4.0279	1.05231	.16434	3.6957	4.3600	2.00	6.00
	0-6	8	4.2500	1.16996	.41364	3.2719	5.2281	2.57	6.00
	Total	235	3.7471	1.09219	.07125	3.6067	3.8875	1.00	6.00
Exhaustion	0-1	32	3.7227	1.01189	.17888	3.3578	4.0875	1.88	6.00
	0-2	38	3.6349	1.08638	.17623	3.2778	3.9920	1.50	5.50
	0-3	79	3.8576	.98277	.11057	3.6375	4.0777	1.00	5.75
	0-4	37	3.6486	.68455	.11254	3.4204	3.8769	2.00	5.00
	0-5	41	3.9238	1.16185	.18145	3.5571	4.2905	1.50	6.00
	0-6	8	4.5000	.95431	.33740	3.7022	5.2978	3.13	6.00
	Total	235	3.8037	1.00185	.06535	3.6750	3.9325	1.00	6.00

Impact of AFIT Program

A One-Way ANOVA was conducted to determine the impact of participating in the AFIT GCA graduate degree program and an officer's intention to search for a job upon approaching the end of their service commitment, turnover intentions, organizational commitment, and burnout. None of the relationships proved to be statistically significant (Table 39). The results of this analysis will be discussed further in Chapter V.

Table 40. SPSS One-Way ANOVA Output for AFIT

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Job Hunt Intention	Between Groups	7.305	1	7.305	2.377	.125
	Within Groups	716.158	233	3.074		
	Total	723.464	234			
TIS	Between Groups	.081	1	.081	.116	.734
	Within Groups	162.837	233	.699		
	Total	162.918	234			
OCQ	Between Groups	.380	1	.380	.517	.473
	Within Groups	171.475	233	.736		
	Total	171.855	234			
Disengagement	Between Groups	.047	1	.047	.039	.844
	Within Groups	279.088	233	1.198		
	Total	279.135	234			
Exhaustion	Between Groups	2.703	1	2.703	2.712	.101
	Within Groups	232.166	233	.996		
	Total	234.869	234			

Long-Term versus Short-Term Retention

The research team analyzed long-term and short-term retention goals between two different demographic groups: CGOs and FGOs. We found that 15.5% of 65Fx/65Wx CGOs (N = 149) and 18.6% FGOs (N = 86) do not intend to serve beyond their current service commitment (Table 40). Officers that have reached the 20-year time-in-service

mark were included in this analysis, which implies that some of these FGO officers are most likely deciding to retire upon completion of their service commitment. The 65Fx/65Wx officer work force reports similar results when compared to the total Air Force, as reported in Chapter II's Table 6. In the 2014 Status of Forces survey, 19% of CGOs and 18% of FGOs in the 2014 Status of Forces survey indicated that they were "unlikely" or "very unlikely" to continue service in the Air Force in the short-run.

For long-term retention, 19.5% of 65Fx/65Wx CGOs and 2.0% of FGOs reported that they "strongly disagree" or "moderately disagree" with having a desire to serve for at least 20 years (Table 41). These numbers suggest that 65Fx/65Wx FGOs are more prone to have the goal of retirement in their minds than FGOs in other career fields (8% of FGOs reported not wanting to make the Air Force a career), as shown earlier in Table 7 of Chapter II. The findings for the 65Fx/65Wx CGOs did not differ greatly from the total Air Force (where 18% of CGOs reported not wanting to make the Air Force a career).

Table 41. Long-Term Retention Goals

Pay Grade		Percentages for Each Response Value				
	1 – Strongly Disagree	**2 – Moderately Disagree**	**3 – Slightly Disagree**	**4 – Slightly Agree**	**5 – Moderately Agree**	**6 – Strongly Agree**
O1-O3	11.4%	8.1%	10.1%	18.1%	18.1%	34.2%
O4-O6	0%	2.0%	0%	12.2%	8.2%	77.6%

N = 198 (149 CGOs, 49 FGOs)

Table 42. Short-Term Retention Goals

Pay Grade		Percentages for Each Response Value				
	1 – Strongly Disagree	**2 – Moderately Disagree**	**3 – Slightly Disagree**	**4 – Slightly Agree**	**5 – Moderately Agree**	**6 – Strongly Agree**
O1-O3	8.1%%	7.4%	14.1%	23.5%	17.4%	29.5%
O4-O6	15.1%	3.5%	5.8%	20.9%	17.4%	37.2%

N = 235 (149 CGOs, 86 FGOs)

Linear Regression on Turnover Intentions

A linear regression was conducted to determine which independent factors have the strongest effect on turnover intentions. The research team found that disengagement had the strongest effect on turnover intentions. That is, it resulted in the highest absolute value of the beta coefficient, as shown in Table 42. Organizational commitment had the second strongest effect on turnover intentions.

Table 43. Linear Regression Output

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.099	.291		17.538	.000
	OCQ	-.206	.056	-.212	-3.713	.000
	Disengagement	-.274	.048	-.358	-5.685	.000
	Exhaustion	-.131	.038	-.157	-3.469	.001
	EaseofMovement	-.057	.045	-.057	-1.273	.204
	DesirabilityofMovement	.132	.037	.195	3.559	.000
	Networking	-.024	.033	-.032	-.724	.470
	CrystallizationofAlt	.085	.028	.138	3.054	.003
	Commissioned Years in Service	-.023	.010	-.183	-2.291	.023
	Time In Service (Years)	.020	.009	.175	2.186	.030

a. Dependent Variable: TIS

Summary

This chapter detailed a thorough analysis of the data and its associated results. It identified the sample population and statistical tests used to determine the normality and reliability of the data. Each hypothesis was tested and its associated results were reported. Additionally, extensive post-hoc analyses were conducted. The subsequent

chapter will include the limitations of this study, the research team's conclusions, and recommendations for action and further research.

V. Conclusions

Chapter Overview

This chapter answers the study's research questions, as well as identifies key takeaways from the research effort. Next, the research team outlines the limitations of this study and proposes recommendations to both senior financial management leadership and the financial management development team. Lastly, we recommend future research efforts based upon our findings.

Research Findings

Research Question: What demographic factors (if any) are influencing 65Fx and 65Wx officers to separate from the active duty Air Force before the 20-year time-in-service mark?

Findings: For the first research question, we found that the following demographics impacted an officer's desire to separate from the active duty Air Force before the 20-year time-in-service mark: commissioning source, rank, marital status, time in service, and deployment experience. Demographics such as gender, current assignment location, and job type were not found to have statistically significant impacts on turnover intentions.

Commissioning Source. Officers who commissioned via the United States Air Force Academy reported higher turnover intentions (mean = 3.2126), while officers who commissioned via ROTC reported the lowest likelihood of turnover (mean = 2.7879) (Table 34). Turnover intentions are measured on a 5-point Likert scale, with "5" being the highest likelihood of turnover and "1" being the lowest. A mean value of 3.2126 leans toward the upper half of the scale. This finding shows that a significant difference exists between the views of ROTC graduates and USAFA graduates; however, the research team cannot make any valid assumptions based solely on our quantitative

dataset. Based on the information in Table 34, officers who commissioned via the Air Force Academy reported higher scores (mean = 4.1304) than ROTC officers (mean = 3.6498) for the "Desirability of Movement" dimension within the Employment Opportunity Index construct. This dimension measured the respondent's views in the sense that separating from the Air Force would result in obtaining a better job in the civilian world. For example, some of the survey items measured by this dimension included "*By and large, the jobs I could get if I left the active duty Air Force are superior to the job I have now*" and "*If I looked for a job, I would probably wind up with a better job than the one I have now*." By examining the quantitative results, Air Force Academy graduates tend to believe that they would end up with a more favorable job if they ended their military service and pursued civilian careers, which could explain the scores associated with a higher likelihood of turnover. Officers who commissioned via OTS consistently reported values in between Air Force Academy graduates and ROTC graduates for all constructs.

Time-In-Service. Officers with 10 years or less of service express a lower desire of serving for at least 20 years (mean = 2.91) than officers who have served for more than 10 years (mean = 1.46). This means that officers with 10 years or less of service lean towards "slightly agreeing" with aiming to serve for 20 years, while officers in the other group lean towards "strongly agreeing" with aiming to serve for 20 years. In alignment with this finding, one respondent stated, "I am already at 11 years, so I am committed to staying until 20 years."

The research team also identified that a statistically significant difference concerning turnover intentions exists once an officer has served for eight or more years.

That is, officers who have served for eight or more years are more likely to stay in the Air Force for a full career than officers who have not yet reached the eight-year mark. The research team assumed that the majority of officers who do not possess the desire to make the Air Force their career decide to separate before reaching eight years of service.

Deployment Experience. Officers that have served in at least one deployment reported lower likelihood of separating from the Air Force (mean = 2.8694) than those who have not deployed (mean = 3.0858). This might be correlated with an officer's rank and time-in-service because most Second Lieutenants and First Lieutenants are not tasked to deploy; only 9 out of 70 Lieutenants (8 prior-enlisted officers, 1 non-prior enlisted officer) that participated in the survey stated that they have completed at least one deployment. In contrast, only 3 of the 86 Field Grade Officers reported not having completed a deployment.

Additionally, a study on Air Force Civil Engineer officers found similar results regarding deployments. "A positive relationship was found between the number of deployments with respect to job satisfaction" (Riddel, 2010). The study also suggested that "deployments are beneficial to the retention of civil engineer company grade officers" and that these officers actually "prefer their deployed job over their garrison job." When 65Fx/65Wx officers deploy, they are exposed to how their FM work impacts the Air Force's mission at both the strategic and operational levels - which can lead to increases in engagement and organizational commitment levels.

Rank. As stated in Chapter IV, Field Grade Officers reported lower turnover intentions than Company Grade Officers, which aligns with the time-in-service demographic findings. First Lieutenants reported the highest likelihood of turnover (mean = 3.2237)

when compared to all other ranks, while Second Lieutenants report slightly lower likelihood of turnover (mean = 3.0469) than Captains (mean = 3.0865). The research team also analyzed each rank's retirement intentions. The results are shown in Table 43, with 36% of First Lieutenant respondents (N = 38) stating that they "Strongly Disagree" or "Moderately Disagree" with having the goal to serve for at least 20 years.

Table 44. Retirement Intentions By Rank

Pay Grade		Percentages for Each Response Value ("I aim to serve for at least 20 years")					Number of Respondents
	1 – Strongly Disagree	**2 – Moderately Disagree**	**3 – Slightly Disagree**	**4 – Slightly Agree**	**5 – Moderately Agree**	**6 – Strongly Agree**	
O1	6%	6%	6%	22%	9%	50%	32
O2	18%	18%	18%	11%	16%	18%	38
O3	10%	4%	8%	20%	23%	35%	79
O4	0%	3%	0%	10%	14%	72%	29
O5	0%	0%	0%	15%	0%	85%	20

The reason as to why First Lieutenants report the highest turnover intentions when compared to other CGOs is still unknown. However, when analyzing the "open-ended" comments section of the survey responses, the most common subject discussed revolved around the importance of leadership and effective mentorship (six respondents). One respondent brought up the notion that supervisors should seek to give young officers work that is more challenging in order to increase engagement and job satisfaction levels. Some respondents expressed that they did not feel as if there was "much room for career progression as an FM officer" or that they do not see how the FM career field plays a vital role in the Air Force.

In contrast, an officer at Wright Patterson AFB expressed that the base holds monthly FM CGO mentor sessions with a FGO and that these mentor sessions "turned his/her mind around from wanting to get out of the FM career field and Air Force." The respondent went on to say that regular mentor sessions such as these "show CGOs that they matter and gives CGOs a different perspective on how the FM career field is viewed from a senior leader's perspective." In a similar sense, one officer stated, "I think it's important to get young FM officers exposure to why their job matters. I wish I knew more about what 'cool' opportunities an FM officer gets to be a part of as an FGO… and what amount of impact a FM FGO can have on the Air Force's priorities and mission." Another officer stated, "ensuring young officers have good mentorship and leadership is the best route to retention" because "when a first assignment goes wrong due to various factors, it is really hard for an individual to change their mind [and want to pursue a career in the Air Force]."

Next, five First Lieutenants expressed comments along the lines of "manning levels" and feeling "overworked." Due to current manning levels, some first lieutenants fill captain billets without the knowledge, experience, or wisdom - which can lead to increased levels of stress and exhaustion. Of the 38 first lieutenants who participated in the survey, 39.5% (15 officers) indicated that they currently work in comptroller squadrons. Lastly, four First Lieutenant respondents expressed the concept of family life making it difficult to stay in for 20 years. For example, these respondents stated that their Air Force career makes it difficult for their spouse to also have a "thriving career," whether the spouse is also active duty Air Force or a civilian.

Marital Status. Divorced officers reported significantly lower turnover intentions (mean = 2.7333) than single officers (mean = 3.1927). However, the Air Force cannot control an officer's marital status, so this demographic will not be addressed in-depth.

Research Question: Do AFIT GCA graduates have higher turnover intentions than non-AFIT GCA graduates?

Findings: As stated in Chapter IV, a One-Way ANOVA was conducted to determine the impact of undergoing the AFIT GCA graduate degree program on an officer's turnover intentions. The results of this test did not prove to be statistically significant (p-value = 0.734) and suggest that no significant difference exists between the turnover intentions of AFIT graduates versus non-AFIT graduates. Additionally, there was also no difference between organizational commitment levels or burnout levels.

These findings proved to be surprising to the research team since there is a notion that AFIT graduates are harder to retain than non-AFIT graduates. By observing Table 3 in Chapter I, we found that of the 54 officers who completed the AFIT GCA degree between FY04-FY12, only 22 still remain in the active duty Air Force (40.7%). Additionally, Table 44 shows that 15.1% of CGO respondents that indicated that they are AFIT graduates or currently enrolled in AFIT (N=33) chose "Strongly Disagree" or "Moderately Disagree" when presented with the item "I aim to serve for at least 20 years in the active duty Air Force," compared with 20.5% of non-AFIT graduate respondents (N=116). Of the seven respondents that completed the AFIT program and are currently ranked as Majors, 100% of them responded with "Strongly Agree" to aim to serve for 20 years, compared with only 63.6% of non-AFIT Majors (N = 22) choosing "Strongly

Agree" (18.2% "Moderately Agree", 13.7% "Slightly Agree", 0% "Slightly Disagree", 4.5% "Moderately Disagree", 0% "Strongly Disagree").

The survey findings suggest that sending an officer to AFIT does not increase the likelihood of the officer separating from the Air Force. In fact, they suggest that sending an officer through the AFIT program may actually slightly increase an officer's desire to remain in the service for at least 20 years. However, when comparing the historical AFIT retention data (Table 3) and overall 65Fx/65Wx retention data for February 1991-July 2016 (Table 2), the data shows that 40.7% of AFIT graduates (who were enrolled in the program during FY04-12) are still serving in the Air Force and that 45.1% of 65Fx/65Wx officers make it to the 20-year mark. The 4.4% difference between the two datasets implies the suggestion that AFIT graduates have slightly higher turnover rates. It is important to note that the survey findings may not align with the implications suggested by the historical dataset because 32 AFIT graduates (that have already separated from the Air Force between FY06-FY16) were not able to participate in the survey. This may also explain why 100% of AFIT graduate respondents that are ranked as majors (N = 7) indicated that they "Strongly Agree" to serve for at least 20 years; it can be assumed that AFIT graduates that did not have the desire to serve for 20 years have already separated from the Air Force.

Table 45. Retirement Intentions (AFIT GCA CGO's vs. Non-AFIT GCA CGO's)

Pay Grade		Percentages for Each Response Value ("I aim to serve for at least 20 years")					
	1 – Strongly Disagree	**2 – Moderately Disagree**	**3 – Slightly Disagree**	**4 – Slightly Agree**	**5 – Moderately Agree**	**6 – Strongly Agree**	**Number of Respondents**
AFIT CGOs	12.1%	3%	12.1%	12.1%	30.3%	30.3%	33
Non-AFIT CGOS	11%	9.5%	9.5%	19.8%	14.7%	35.3%	116

Additionally, there exists a trend involving CGOs indicating a stronger desire to serve for 20-year careers when filling out the annual Department of Defense Status of Forces survey (48%) than actually depicted by historical retention rates (38%) (see Table 45). Our research found that of all the CGOs that completed our survey, 52.3% indicated wanting to serve for 20-year careers, as opposed to the historical retention rate of 45.1% for the career field. Approximately 60% of AFIT CGOs indicated planning to stay for 20-year careers, as opposed to 50% of non-AFIT CGOs.

Table 46. Historical Retention Rates versus Survey Findings

AFIT GCA Grads Historical Retention Rate (FY04-FY12)	N = 54	40.7%
Historical **Total FM Officer** Workforce Retention Rate (FY91-FY16	N = 2739	45.1%
Historical **Total Air Force Officer** Retention Rate		38.0%
2014 DoD Status of Forces Survey: **CGOs (All Air Force AFSCs)** planning on staying for 20-yr careers	N = 960	48.0%
Our Survey Findings: **All FM CGOs** planning on staying for 20-yr careers*	N = 149	52.3%
Our Survey Findings: **AFIT CGOs** planning on staying for 20-yr careers*	N = 33	60.6%
Our Survey Findings: **Non-AFIT CGOs** planning on staying for 20-yr careers*	N = 116	50.0%

**The respondents chose "Strongly Agree" or "Moderately Agree" when presented with "I aim to serve for at least 20 years in the active duty Air Force.*

Research Question: How do the constructs of employee burnout, organizational commitment, and perceived availability of job alternatives impact the 65Fx/65Wx officer workforce?

Findings:

Burnout. In order to answer this research question, the research team conducted numerous statistical tests, as shown in Chapter IV. For example, Hypothesis 1 examined the burnout levels among the different types of jobs in which 65Fx/65Wx officers currently serve. We found that there was no statistically significant difference among the different types of jobs and their associated burnout levels (Table 13). However, the research team did find that officers currently serving in comptroller squadrons reported slightly higher levels of exhaustion than all other job types (Table 14). The job type with the lowest exhaustion level was cost analysis. Officers serving in acquisition budget roles reported being the most disengaged (mean value = 3.3915), while officers serving in MAJCOM/Air Staff roles report being the most engaged (mean value = 3.8690).

Additionally, the research team compared different assignment locations (Los Angeles AFB, Hanscom AFB, Wright Patterson AFB, DC area, and "Other") to see how they affected burnout dimensions. Officers at Hanscom AFB reported being the most disengaged from their work, while officers in the DC area reported being the least exhausted and most engaged in their work. Officers serving in "Other" locations reported being the most exhausted; this finding may align with the results for comptroller squadron officers being the most exhausted, since the majority of these officers do not serve in Los Angeles AFB, Hanscom AFB, Wright Patterson AFB, or the DC area.

The research team is unable to explain exactly why officers serving in acquisition budget roles report being the most disengaged from their work based on the quantitative results provided by our survey data. However, by examining the open-ended comments section of the survey, some of these comments by current acquisition budget personnel highlight possible issues that result in disengagement:

> M*y acquisition experience at Hanscom AFB was completely underwhelming. As a captain, I felt completely underutilized, unchallenged, and lost in the fray, despite my best efforts to get involved in the organization and take on extra duties. Our Program Manager (PM) counterparts hold all responsibility and our civil servant FM'ers are not very good at bringing young CGO FM officers into the fold.*
>
> *It feels like FM is never included and the PM role is the glorified poster child of the Acquisition workforce. I have been working incredibly hard to turn around the programs I am working for… [but] in the Acquisition world I am reminded daily that 'I am just a functional.'*
>
> *The FM acquisition career field seems geared toward civilians - officers sometimes seem like an afterthought… Sometimes they are not given programs to work as Financial Managers because programs are given to civilians for fear of deployments or lack of a backfill, so the CGOs are left with non-FM work (i.e. exec) or multiple additional duties.*

Lastly, the research team also tested the relationship between an officer's rank and his/her burnout levels. We found that FGOs reported higher levels of engagement than CGOs, and that First Lieutenants reported being the most exhausted and most disengaged group (Table 38). This finding holds relation with our finding that First Lieutenants report the highest likelihood of turnover when compared with the different ranks (Table 38).

Organizational Commitment. Hypothesis 2 examined the relationship between organizational commitment and turnover intentions. The research team found that the more committed an officer is to the mission and values of the Air Force, the lower

likelihood that the officer will decide to voluntarily separate from the Air Force (Table 17). We also found that the commitment levels between FGOs and CGOs differed significantly (Table 37). Field Grade Officers reported higher levels of commitment than CGOs, with First Lieutenants and Captains reporting the lowest levels of commitment.

Perceived Availability of Job Alternatives. Hypothesis 3 tested the levels of perceived availability of job alternatives between AFIT graduates and non-AFIT graduates. The research team was surprised to find that there was no statistically significant difference between the two groups of officers (Table 18). However, as mentioned previously in this chapter, these results may be skewed because 32 out of 54 AFIT graduates have already separated from the Air Force during FY06-FY16. The research team also examined current assignment locations and found that officers currently stationed in the DC area reported the highest scores for the "Networking" dimension and "Ease of Movement" dimension of the Employment Opportunity Index construct (Table 26); this means that they identified with having a vast network of contacts that could assist with securing a civilian job, as well as having many available job opportunities. Additionally, the officers in the DC area reported the highest levels of organizational commitment, meaning that even though these officers feel as if they could easily secure a civilian job, their commitment to the Air Force stops them from deciding to separate.

Limitations

Conducting an online survey gives rise to a number of possible limitations. To begin with, the research team relied on individual respondents to self-report their demographics (e.g., age, rank, current job), attitudes regarding future behavior (e.g.

turnover intentions, job hunt intentions), and psychological states and perceptions (e.g. organizational commitment, burnout, civilian job opportunities). The issue of self-reporting bias becomes known in the sense that the responses provided by each survey respondent cannot be verified for accuracy, especially since the survey was anonymous.

Additionally, even though the surveys were anonymous respondents may have fallen victim to social desirability bias. This bias occurs when respondents choose to answer questions in a way that makes them look favorable, or they think is the organizationally-correct answer. Due to the nature of this survey and how it revolved around sensitive issues such as turnover, respondents may have felt the need to answer favorably instead of honestly (i.e. express a strong desire to stay in the Air Force for 20 years).

Recommendations for Senior Leaders

The findings from this survey exposed how important leadership and mentorship is within the 65Fx/65Wx career field and its role in retaining young CGOs, especially first lieutenants. CGOs at locations such as Wright Patterson AFB are offered monthly mentor sessions with FGOs and as stated earlier; however, this base benefits from having a large population of 65Fx/65Wx officers. The research team would recommend that other bases with large populations of 65Fx/65Wx officers (Hanscom AFB, Los Angeles AFB, and MAJCOM bases) hold regular mentor sessions with their CGOs, if they do not do so already. These sessions could revolve around promoting job meaningfulness (i.e. explaining how FM plays a vital role in the Air Force), career progression opportunities (i.e. identifying exciting jobs that FM officers are allowed to apply for when they are

FGOs), and other relevant information about the career field (e.g. current promotion rates for the 65Fx/65Wx workforce, FM deployment experiences, etc.).

Additionally, the open-ended comments section of our survey identified that there exists a stigma that if an officer serves on the acquisition budget or cost analysis side for an assignment it sometimes represents a "career setback" and a "detriment" to an officer's career. This viewpoint aligned with the research team's findings when they asked respondents why they are not interested in pursuing the AFIT GCA graduate degree. Of 141 respondents, 43% "Strongly Agreed" or "Moderately Agreed" that they did not want the AFIT GCA degree because they "*do not want to work in the Cost Analysis career field*," and 41% also responded similarly for "*the assignment does not align well with professional goals*." Senior leadership within the 65Fx/65Wx officer workforce can combat this negative perception of Cost Analysis and Acquisition Budget by expressing the need for the set of skills associated with the Cost and Acquisition Budget jobs. During the recommended mentor sessions, FGOs can discuss how Cost and Acquisition Budget can improve an officer's skillset and give examples of current senior leadership that have served a tour in Acquisition Budget or Cost Analysis.

Lastly, the notion of keeping the Acquisition Budget and Cost Analysis side separate from the Operations and Maintenance (O&M) side of FM also became prevalent when analyzing the open-ended comments section of our survey data. Numerous officers currently serving in acquisition budget or cost analysis jobs expressed that they had no desire to work in O&M or become a comptroller squadron commander. Typically, officers that are more "technically inclined" identify with enjoying 65Wx jobs. In the most severe case, one respondent stated, "I love what I do [in a 65Wx cost analysis

billet]. If 65Fx and 65Wx were still two separate [tracks], I would definitely stay and try to make a career in the 65Wx field. But because I know I will have to rotate back to a 65Fx billet most likely, I have put in a request for separation." Senior leadership should be aware that some officers have no desire to broaden their FM skillset by switching from acquisition budget and cost analysis to O&M or vice versa, and that doing so may result in some officers deciding to separate from the Air Force.

Recommendations for Future Research

As a result of this study, future opportunities for research have developed. A follow-up study can be conducted solely on the acquisition side of the FM officer workforce (acquisition budget and cost analysis officers). This study may involve the use of qualitative instead of quantitative data in order to more accurately determine the reasons for disengagement and higher turnover intentions among young officers that fill these types of positions. Additionally, the qualitative data from the open-ended comments section of the survey can be pursued more in-depth with another set of questions or possibly interviews.

In addition, the Department of Defense plans to implement a new military retirement system in January 2018. This new retirement system can be analyzed to see if it influences the turnover intentions of the 65Fx/65Wx officer workforce (or even other Air Force career fields). For example, would officers who reach the 10-year mark feel more or less compelled to stay in the Air Force for 20 years? Interestingly, one survey respondent stated, "I am already at 11 years, so I am committed to staying until 20 years… [But] if the new retirement system was in place, I would separate earlier."

Lastly, researchers can analyze historical data on 65Fx/65Wx officer separations and retirements to determine if any trends exist. These possible trends could revolve around demographic factors (e.g. base location, education, age, gender, etc.) and/or external factors (e.g. the state of the country's economy, war operations, etc.). Officers who have already separated from the Air Force can also be interviewed or surveyed in order to gain a more in-depth analysis of reasons for separation. Future researchers may also consider analyzing the quality (possibly measured by performance report ratings, experience levels, education history, professional credentials, etc.) of officers that decide to separate versus remain in the Air Force for a full career.

Summary

The findings of this research identified factors that may be contributing to a 65Fx/65Wx officer's desire to separate or remain in the active duty Air Force. The research team found that the current inventory of AFIT graduates did not differ significantly in their turnover intentions when compared to non-AFIT graduates. However, these findings may be limited to the fact that 59% of AFIT graduates from the graduating classes of FY06-FY14 have already separated from the active duty Air Force. We also identified First Lieutenants as the group with the highest likelihood of separating from the active duty Air Force. Due to these findings, the researchers recommend that senior leadership focus their retention efforts primarily on First Lieutenants and critically examine how to retain the best officers within this "high-risk" group.

Appendix A. Secretary of the Air Force for Financial Management and Comptroller (SAF/FM) Mission Statement

Maximize Resources for our Nation's Air Force

- It means make the most impact by doing the most good with the resources we have..."make every dollar count"
- It means we meet resource challenges by understanding the requirement, providing solid estimates and by being an honest broker. That means being bold, objective, and truthful...do the right thing, every time
- It means we are key advisors to our leadership as we balance limited resources against top priorities
- It means we maximize resources for our leaders - timely, defendable information, analysis and recommendations
- It means we deliver for our Airmen - timely and accurate pay...so they can focus on their job, not their pay
- It means we deliver for our Air Force - audit readiness, accurate accounting and proven systems
- It means we provide decision support. Understanding the need, gathering and analyzing the information, providing options and recommendations focused on improvements, focused on mission"

Appendix B. Survey Control Number (SCN) Request to AFIT Survey Control Panel (ASCP) Review

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY (AETC)

13 September 2016

MEMORANDUM FOR AFIT/ENR

FROM: AFIT/ENV
2950 Hobson Way
Wright Patterson AFB, OH 45433-7765

SUBJECT: Survey Control Number (SCN) Request for AFIT Survey Control Panel (ASCP) Review

1. The purpose of this study is to analyze turnover within the Air Force's Financial Management and Cost Analysis officer career fields. The research will attempt to identify factors that influence active duty officers to choose to separate before the 20-year time-in-service mark.
    a. The following research questions will be analyzed:
        i. What factors are impacting Financial Management (65Fx) and Cost Analysis (65Wx) officers to separate before the 20-year time-in-service mark?
        ii. Do AFIT GCA graduates have higher turnover intentions than non-AFIT GCA graduates?
            1. Turnover Intention is defined as "a conscious and deliberate willfulness to leave the organization" (Tett & Meyer, 1993).
    b. The following research hypotheses will be tested:
        i. Null Hypothesis: There is no significant difference between turnover intentions among the two different career fields.
        ii. AFIT GCA graduates report higher levels of perceived availability of civilian job alternatives than their non-AFIT peers.
        iii. Officers past the 10 year time-in-service mark have lower turnover intentions than officers under 10-years.
        iv. 65Fx base-level officers (Comptroller Squadrons) report higher levels of burnout than their 65Wx peers.
        v. Higher levels of organizational commitment will be negatively related to turnover intentions.
    c. In order to assess the views of the current 65Fx and 65Wx officer career fields, this research effort will involve asking attitude and opinion questions. The survey will also ask factual questions, in regards to the respondents' demographics (example: age, marital status, time in service, etc).

2. The findings will be presented to senior Financial Management and Cost Analysis leaders; the results of the survey and research will positively impact the career fields' missions and arm senior FM leaders with vital information regarding our current workforces' values and career intentions, as well as project future manpower levels and inform relevant decisions. The research effort aligns with current Financial Management Military in Acquisition (FMIA) initiatives, with a goal to robust FM officer presence within the acquisition community.

a. Sponsor Agency: Air Force Life Cycle Management Center (AFLCMC/FM); Colonel David Peeler

3. Contact Information:
   a. Primary Investigator: Lieutenant Colonel Brandon Lucas
      i. Phone DSN: 785-3636 ext. 4441; Commercial: 937-255-3636 ext. 4441
      ii. E-mail: Brandon.Lucas@afit.edu
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   b. Additional Researcher: First Lieutenant Virginia Galbraith
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      ii. E-mail: Virginia.Galbraith@afit.edu
      iii. Mailing Address: 2950 Hobson Way, Wright Patterson AFB, Ohio 45433-7765

4. Target Population: All active duty 65Fx and 65Wx officers

5. Sample Selection/Size: The Air Force Personnel Center (AFPC) 65x Development Team will provide contact information of all active duty 65Fx and 65Wx officers. There are approximately 620 officers in these two career fields. All officers will be asked to voluntarily participate in this research effort.

6. Data Collection: Data will be collected via an online questionnaire. Specifically, SurveyMonkey software will be used to collect responses.

7. Data Collection Instrument: Please see Attachments 1 & 2.

8. Target Confidence Level and Error Rate: To be determined, pending the actual number of survey respondents.

9. Statistical Procedures Employed in the Analysis of Results:
   a. Data will be exported to Statistical Package for the Social Sciences (SPSS) software in order to be analyzed
   b. Direct and Indirect effects between the variables will be tested, as well as Mediator effects

10. Reporting Format: The results will be published within an Air Force Institute of Technology graduate thesis. The results will also be briefed via PowerPoint slideshow to senior FM leaders. Survey results will be made available, upon request. Additionally, an email may possibly be sent out to the career fields informing the current work force of the survey results and research findings. Lastly, the research will also be submitted to various journals for possible publication.

11. Project Timeline:
    a. Online survey will be open for approximately 4 weeks, in order to maximize response rates, between the October-December 2016 timeframe.
    b. Findings will be released in March 2017.

12. Functional Sponsor Letter of Approval: Please see Attachment 3.

13. If you have any questions about this request, please contact Lt Col Brandon Lucas (primaryinvestigator) – Phone DSN: 785-3636 ext. 4441; Commercial: 937-255-3636 ext. 4441; E-mail – Brandon.Lucas@afit.edu.

Lieutenant Colonel Brandon Lucas
Principal Investigator
Air Force Institute of Technology

Attachments:
1 – Proposed Data Collection Instrument (as it will appear to the subjects)
2 – Proposed Data Collection Instrument (based on construct)
3 – Functional Sponsor Letter of Approval

ATTACHMENT 1

INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974

Informed Consent Document
For
Turnover Analysis Within the Air Force Financial Management and Cost Analysis (65X) Officer Career Fields

AFIT/ENV, Air Force Institute of Technology, Wright Patterson AFB, OH

Principal Investigator: Lieutenant Colonel Brandon M. Lucas, DSN 785-3636 ext. 4441. Comm 937-255-3636 ext. 4441, AFIT/ENV, Brandon.lucas@afit.edu

Associate Investigator: First Lieutenant Virginia L. Galbraith, DSN 785-3636 ext. 4441. Comm 937-255-3636 ext. 4441, AFIT/ENV, Virginia.Galbraith@afit.edu

Nature and Purpose: You are being asked to participate in a research effort currently being conducted at the Air Force Institute of Technology. Your participation is completely voluntary and will consist of completing an *anonymous* 20-30 minute online questionnaire. All active duty Air Force Financial Managers (65F) and Cost Analysts (65W) will be asked to participate in this study. Approximately 600 subjects will be enrolled in this study.

The purpose of this research is to identify factors that influence Air Force 65X officers to separate from the active duty instead of pursue 20-year careers. The research will also align with current Financial Management Military in Acquisition (FMIA) initiatives.

Experimental Procedures: Data will be collected via the online survey software and analyzed by the research team. The results will be presented to senior leaders within the Financial Management and Cost Analysis career fields in order for them to better understand their current workforce's values and career intentions.

The survey data will be kept confidential. Personal identifiers such as name and social security number **will not** be asked for. Certain demographic data such as age, gender, marital status, time-in-service, and commissioning source will be collected in order to compare the current 65X workforce with historical data on 65X officers that have already separated or retired within the years 1991-2016. In no way will the demographic data be analyzed to determine the identity of individual participants. The data will be kept in a password-protected file and only accessible to the research team.

The final research report will be made available via the Air Force Institute of Technology (AFIT) and the Defense Technical Information Center (DTIC). Findings may also be published in related journals or publications.

Discomfort and Risks: We do not foresee any physical discomforts or potential medical risks to participants undergoing this research effort.

Benefits: You will not receive any direct benefits from participating in this study.

Compensation: You will not receive any compensation for voluntarily participating in this study.

Alternatives: You may choose not to participate in this study.

Entitlements and Confidentiality: The decision to participate in this research is completely voluntary. No efforts will be made to coerce or intimidate you into participating in this study. Lt Col Lucas or 1Lt Galbraith will adequately answer any and all questions you have about this study, your participation, and the procedures involved. They can be reached at (937) 255-3636 ext. 4441 or via email (Brandon.Lucas@afit.edu and Virginia.Galbraith@afit.edu). You may withdraw this consent at any time and discontinue further participation in this study without prejudice to your career or entitlements.

YOU ARE MAKING A VOLUNTARY DECISION TO PARTICIPATE IN THIS STUDY. BY COMPLETING AND SUBMITTING THIS QUESTIONNAIRE, YOU ARE INDICATING THAT YOU HAVE READ AND AGREE TO THE INFORMATION ABOVE.

Privacy Act Statement

Authority: We are requesting disclosure of personal information. Researchers are authorized to collect personal information on research subjects under The Privacy Act-5 USC 552a, 10 USC 55, 10 USC 8013, 32 CFR 219, 45 CFR Part 46, and EO 9397, November 1943.

Purpose: It is possible that latent risks or injuries inherent in this experiment will not be discovered until some time in the future. The purpose of collecting this information is to aid researchers in locating you at a future date if further disclosures are appropriate.

Routine Uses: Information may be furnished to Federal, State and local agencies for any uses published by the Air Force in the Federal Register, 52 FR 16431, to include, furtherance of the research involved with this study and to provide medical care.

Disclosure: Disclosure of the requested information is voluntary. No adverse action whatsoever will be taken against you, and no privilege will be denied you based on the fact you do not disclose this information. However, your participation in this study may be impacted by a refusal to provide this information

Please read each question and indicate your response using the scale provided for each question:

1	How often have you considered leaving your job (upon completion of your service commitment)?	**Never**	1-------2-------3-------4-------5	**Always**
2	To what extent is your current job satisfying your personal needs?	**To no extent**	1-------2-------3-------4-------5	**To a very large extent**
3	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	**Never**	1-------2-------3-------4-------5	**Always**
4	How often do you dream about getting another job that will better suit your personal needs?	**Never**	1-------2-------3-------4-------5	**Always**
5	How likely are you to accept another job at the same compensation level should it be offered to you (upon completion of your service commitment)?	**Highly unlikely**	1-------2-------3-------4-------5	**Highly likely**
6	How often do you look forward to another day at work?	**Never**	1-------2-------3-------4-------5	**Always**

Please indicate the degree of agreement/disagreement with each statement:

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Moderately Agree

6 = Strongly Agree

7: I aim to serve at least 20 years in the active duty Air Force.

8: I am planning to look for a new job outside of the Air Force as soon as I get within one year of my service commitment.

9: I plan on working in the active duty Air Force beyond my current service commitment.

Please indicate the degree of agreement/disagreement with each statement, in regards to your day-to-day job duties and responsibilities:

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Moderately Agree

6 = Strongly Agree

Q1. I always find new and interesting aspects in my work.

Q2. There are day when I feel tired before I arrive at work.

Q3. It happens more and more often that I talk about my work in a negative way.

Q4. After work, I tend to need more time than in the past in order to relax and feel better.

Q5. I can tolerate the pressure of my work very well.

Q6. Lately, I tend to think less at work and do my job almost mechanically.

Q7. I find my work to be a positive challenge.

Q8. During my work, I often feel emotionally drained.

Q9. Over time, one can become disconnected from this type of work.

Q10. After working, I have enough energy for my leisure activities.

Q11. Sometimes I feel sickened by my work tasks.

Q12. After my work, I usually feel worn out and weary.

Q13. This is the only type of work that I can imagine myself doing.

Q14. Usually, I can manage the amount of my work well.

Q15. I feel more and more engaged in my work.

Q16. When I work, I usually feel energized.

Respondents indicate the degree of agreement/disagreement with each statement, in regards to their current organization – the US AIR FORCE:

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Moderately Agree

6 = Strongly Agree

Q1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.

Q2. I talk up this organization to my friends as a great organization to work for.

Q3. I feel very little loyalty to this organization.

Q4. I would accept almost any type of job assignment in order to keep working for this organization.

Q5. I find that my values and the organization's values are very similar.

Q6. I am proud to tell others that I am part of this organization.

Q7. I could just as well be working for a different organization as long as the type of work was similar.

Q8. This organization really inspires the very best in me in the way of job performance.

Q9. It would take very little change in my present circumstances to cause me to leave this organization.

Q10. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.

Q11. There's not too much to be gained by sticking with this organization indefinitely.

Q12. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.

Q13. I really care about the fate of this organization.

Q14. For me, this is the best of all possible organizations for which to work.

Q15. Deciding to work for this organization was a definite mistake on my part.

Respondents indicate the degree of agreement/disagreement with each statement:

1 = Strongly Disagree

2 = Moderately Disagree

3 = Slightly Disagree

4 = Slightly Agree

5 = Moderately Agree

6 = Strongly Agree

Q1. There simply aren't very many jobs for people like me in today's job market.

Q2. Given my qualifications and experience, getting a new job would not be very hard at all.

Q3. I can think of a number of organizations that would probably offer me a job if I were looking.

Q4. If I looked for a job, I would probably wind up with a *better* job than the one I have now.

Q5. By and large, the jobs I could get if I left here are *superior* to the job I have now.

Q6. Most of the jobs I could get would be an *improvement* over my present circumstances.

Q7. I have a far-reaching "network" of contacts, which could help me find out about other job opportunities.

Q8. I have contacts in other companies who might help me line up a new job.

Q9. My work and/or social activities tend to bring me in contact with a number of people who might help me line up a new job.

Q10. Right now, I have a job offer "on the table" from another employer, if I choose to take it.

Q11. I have found a better alternative than my present job.

Q12. I am unable to move to another place of residence now even if a better job came along.

Q13. My spouse's career makes it very difficult for me to leave this organization.

Q14. There are factors in my personal life (e.g., school age children, relatives, etc.) which makes it very difficult for me to leave in the near future.

DEMOGRAPHICS

1. Age
2. Gender
3. Rank
4. Time in Service
5. Current Air Force Specialty Code (AFSC)
6. Current Job Type
    a. Comptroller Squadron (CPTS)
    b. MAJCOM
    c. Special Programs Office (SPO)
    d. AFIT GCA Student
    e. Other
        i. Please specify: _____
7. Commissioned Years in Service
8. Commissioning Source (OTS, ROTC, USAFA)
9. Marital Status
    a. Joint Spouse?
10. Number of Children in Household
11. Are you currently stationed overseas (OCONUS)?
    a. Yes/No
12. In regards to your career, up-to-date, what field have you spent the majority of your career working in?
    a. 65F (O&M)
    b. 65F (Acquisition Budget)
    c. 65W (Cost Analysis)
    d. Other (Career Broadening, Special Duty, Student, Instructor, etc)
        i. Please specify: _____
13. Are you currently stationed in any of the following locations: Los Angeles AFB, Hanscom AFB, the DC area, Eglin AFB, or Wright Patterson AFB? If so, please specify which location.
    a. Yes; (Specify Location – drop down list)
    b. No
14. Have you completed any deployments? If so, how many?
    a. Yes; Specify # of deployments
    b. No
15. Are you currently enrolled in a graduate degree program?
    a. Yes/No
16. Have you already completed a graduate degree program?
    a. Yes/No
17. Are you currently enrolled or have you completed the AFIT GCA Master's degree program?
    a. Yes
    b. No, please specify reasons as to why you did not want to pursue the program when you were in the eligibility window. Or, if you are currently within the eligibility window, why do you not want to pursue the program?
        i. Likert Scale? Strongly Disagree to Strongly Agree, with N/A option for each statement.
            1. I dislike the assignment location of Dayton, Ohio.
            2. I already have/am already pursuing a graduate degree.
            3. I did not/do not want to go back to school at all.
            4. I did not/do not want an AFIT graduate degree in Cost Analysis.

5. I did not/do not want to incur the Active Duty Service Commitment associated with attending AFIT.
6. I did not/do not want to work in the Cost Analysis career field.
7. The assignment did not/does not align well with my personal life (spouse, children, etc).
8. I did not/do not feel as if I would succeed academically in the AFIT program.
9. Other reasons? Please specify….

ATTACHMENT 2

Turnover Intention Scale (TIS-6)

Turnover Intention = **"a conscious and deliberate willfulness to leave the organization"**

"A single factor was extracted (principal axis factoring with varimax rotation) with a Cronbach alpha reliability coefficient (α = 0.80) for the TIS-6. These findings confirm the factorial validity as well as the reliability of the TIS-6….The findings of this study further suggest that the TIS-6 can be used as a reliable and valid measure to assess turnover intention. The TIS-6 can therefore be used for business applications and academic research to validly and reliably assess turnover intention or to predict actual turnover."

Source of definition: Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. Personnel psychology, 46(2), 259-293.

Source of Instrument: Bothma, C., & Roodt, G. (2013). The validation of the turnover intention scale. SA Journal Of Human Resource Management, 11(1), 12 pages.

Please read each question and indicate your response using the scale provided for each question:

* = Reverse-coded item

During the past 9 months….

1	How often have you considered leaving your job (upon completion of your service commitment)?	**Never**	1-------2-------3-------4-------5	**Always**
2*	To what extent is your current job satisfying your personal needs?	**To no extent**	1-------2-------3-------4-------5	**To a very large extent**
3	How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?	**Never**	1-------2-------3-------4-------5	**Always**
4	How often do you dream about getting another job that will better suit your personal needs?	**Never**	1-------2-------3-------4-------5	**Always**
5	How likely are you to accept another job at the same compensation level should it be offered to you (upon completion of your service commitment)?	**Highly unlikely**	1-------2-------3-------4-------5	**Highly likely**
6	How often do you look forward to another day at work?	**Never**	1-------2-------3-------4-------5	**Always**

Respondents indicate the degree of agreement/disagreement with each statement:

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Slightly Agree
5 = Moderately Agree
6 = Strongly Agree

* = Reverse-coded item

7*: I aim to serve at least 20 years in the active duty Air Force.
8: I am planning to look for a new job outside of the Air Force as soon as I get within one year of my service commitment.
9*: I plan on working in the active duty Air Force beyond my current service commitment.

Oldenburg Burnout Inventory (OLBI)

"The findings clearly indicate that the OLBI is a reliable instrument including two moderately high correlating dimensions. The reliability was α = .85 both for exhaustion and disengagement."

SOURCE of Instrument: Demerouti, E., & Bakker, A. B. (2008). The Oldenburg Burnout Inventory: A good alternative to measure burnout and engagement. *Handbook of stress and burnout in health care. Hauppauge, NY: Nova Science.*

Respondents indicate the degree of agreement/disagreement with each statement, in regards to their day-to-day job duties and responsibilities:

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Slightly Agree
5 = Moderately Agree
6 = Strongly Agree

* = Reverse-coded item

Disengagement:
Q1. I always find new and interesting aspects in my work.
Q3*. It happens more and more often that I talk about my work in a negative way.
Q6*. Lately, I tend to think less at work and do my job almost mechanically.
Q7. I find my work to be a positive challenge.
Q9*. Over time, one can become disconnected from this type of work.
Q11*. Sometimes I feel sickened by my work tasks.
Q13. This is the only type of work that I can imagine myself doing.
Q15. I feel more and more engaged in my work.

Exhaustion:
Q2*. There are day when I feel tired before I arrive at work.
Q4*. After work, I tend to need more time than in the past in order to relax and feel better.
Q5. I can tolerate the pressure of my work very well.
Q8*. During my work, I often feel emotionally drained.
Q10. After working, I have enough energy for my leisure activities.
Q12*. After my work, I usually feel worn out and weary.
Q14. Usually, I can manage the amount of my work well.
Q16. When I work, I usually feel energized.

ORGANIZATIONAL COMMITMENT QUESTIONNAIRE (OCQ)

"Coefficient alpha is consistently very high, ranging from .82 to .93, with a median of .90"

SOURCE of Instrument: Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior, 14*(2), 224-247.

Respondents indicate the degree of agreement/disagreement with each statement, in regards to their current organization – the US AIR FORCE:

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Slightly Agree
5 = Moderately Agree
6 = Strongly Agree

* = Reverse-coded item

Q1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
Q2. I talk up this organization to my friends as a great organization to work for.
Q3*. I feel very little loyalty to this organization.
Q4. I would accept almost any type of job assignment in order to keep working for this organization.
Q5. I find that my values and the organization's values are very similar.
Q6. I am proud to tell others that I am part of this organization.
Q7*. I could just as well be working for a different organization as long as the type of work was similar.
Q8. This organization really inspires the very best in me in the way of job performance.
Q9*. It would take very little change in my present circumstances to cause me to leave this organization.
Q10. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
Q11*. There's not too much to be gained by sticking with this organization indefinitely.
Q12*. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.
Q13. I really care about the fate of this organization.
Q14. For me, this is the best of all possible organizations for which to work.
Q15*. Deciding to work for this organization was a definite mistake on my part.

EMPLOYMENT OPPORTUNITY INDEX (EOI)

"The results show reasonable levels of reliability for the various scales in this sample: Ease of Movement (.70), Desirability of Movement (.85), Networking (.76), Crystallization of Alternatives (.82), and Mobility (.73)."

SOURCE of Instrument: Griffeth, R., Steel, R., Allen, D., & Bryan, N. (2005). The development of a multidimensional measure of job market cognitions: The employment opportunity index (EOI). Journal of Applied Psychology, 90(2): 335-349.

Respondents indicate the degree of agreement/disagreement with each statement:

1 = Strongly Disagree
2 = Moderately Disagree
3 = Slightly Disagree
4 = Slightly Agree
5 = Moderately Agree
6 = Strongly Agree

* = Reverse-coded item

Ease of Movement:
Q1*. There simply aren't very many jobs for people like me in today's job market.
Q2. Given my qualifications and experience, getting a new job would not be very hard at all.
Q3. I can think of a number of organizations that would probably offer me a job if I were looking.

Desirability of Movement:
Q4. If I looked for a job, I would probably wind up with a *better* job than the one I have now.
Q5. By and large, the jobs I could get if I left here are *superior* to the job I have now.
Q6. Most of the jobs I could get would be an *improvement* over my present circumstances.

Networking:
Q7. I have a far-reaching "network" of contacts, which could help me find out about other job opportunities.
Q8. I have contacts in other companies who might help me line up a new job.
Q9. My work and/or social activities tend to bring me in contact with a number of people who might help me line up a new job.

Crystallization of Alternatives:
Q10. Right now, I have a job offer "on the table" from another employer, if I choose to take it.
Q11. I have found a better alternative than my present job.

Mobility:
Q12*. I am unable to move to another place of residence now even if a better job came along.
Q13*. My spouse's career makes it very difficult for me to leave this organization.
Q14*. There are factors in my personal life (e.g., school age children, relatives, etc.) which makes it very difficult for me to leave in the near future.

DEMOGRAPHICS

1. Age
2. Gender
3. Rank
4. Time in Service
5. Current Air Force Specialty Code (AFSC)
6. Current Job Type
    a. Comptroller Squadron (CPTS)
    b. MAJCOM
    c. Special Programs Office (SPO)
    d. AFIT GCA Student
    e. Other
        i. Please specify: _____
7. Commissioned Years in Service
8. Commissioning Source (OTS, ROTC, USAFA)
9. Marital Status
    a. Joint Spouse?
10. Number of Children in Household
11. Are you currently stationed overseas (OCONUS)?
    a. Yes/No
12. In regards to your career, up-to-date, what field have you spent the majority of your career working in?
    a. 65F (O&M)
    b. 65F (Acquisition Budget)
    c. 65W (Cost Analysis)
    d. Other (Career Broadening, Special Duty, Student, Instructor, etc)
        i. Please specify: _____
13. Are you currently stationed in any of the following locations: Los Angeles AFB, Hanscom AFB, the DC area, Eglin AFB, or Wright Patterson AFB? If so, please specify which location.
    a. Yes; (Specify Location – drop down list)
    b. No
14. Have you completed any deployments? If so, how many?
    a. Yes; Specify # of deployments
    b. No
15. Are you currently enrolled in a graduate degree program?
    a. Yes/No
16. Have you already completed a graduate degree program?
    a. Yes/No
17. Are you currently enrolled or have you completed the AFIT GCA Master's degree program?
    a. Yes
    b. No, please specify reasons as to why you did not want to pursue the program when you were in the eligibility window. Or, if you are currently within the eligibility window, why do you not want to pursue the program?
        i. Likert Scale? Strongly Disagree to Strongly Agree, with N/A option for each statement.
            1. I dislike the assignment location of Dayton, Ohio.
            2. I already have/am already pursuing a graduate degree.
            3. I did not/do not want to go back to school at all.
            4. I did not/do not want an AFIT graduate degree in Cost Analysis.

5. I did not/do not want to incur the Active Duty Service Commitment associated with attending AFIT.
6. I did not/do not want to work in the Cost Analysis career field.
7. The assignment did not/does not align well with my personal life (spouse, children, etc).
8. I did not/do not feel as if I would succeed academically in the AFIT program.
9. Other reasons? Please specify….

DEPARTMENT OF THE AIR FORCE
AIR FORCE MATERIEL COMMAND
AIR FORCE LIFE CYCLE MANAGEMENT CENTER

8 September 2016

MEMORANDUM FOR HQ AFPC/DSYS

FROM: AFLCMC/FM

SUBJECT: Survey Sponsorship

1. The Air Force Life Cycle Management Center (AFLCMC), Financial Management Directorate is sponsoring the survey being conducted by Lieutenant Colonel Brandon Lucas and First Lieutenant Virginia Galbraith from the Air Force Institute of Technology.

2. They are researching retention within the Air Force's Financial Management budget (65Fx) and cost analysis (65Wx) officer career fields. All survey instruments have been thoroughly reviewed and approved by our organization. The results of the survey and research will positively impact our mission and arm senior FM leaders with vital information regarding our current workforces' values and career intentions, as well as project future manpower levels and inform relevant decisions. The research efforts also align with the Air Force's Financial Management Military in Acquisition initiative, with a goal to robust FM officer presence within the acquisition community.

3. Thank you for assisting Lt Col Lucas and Lt Galbraith. If you have any questions regarding AFLCMC involvement/interest, please don't hesitate to contact me at DSN 318-436-0110 or at either David.Peeler@us.af.mil or David.Peeler@auab.afcent.af.mil for further information.

PEELER.DAVID.L.JR.1061036500

Digitally signed by PEELER.DAVID.L.JR.1061036500
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USAF, cn=PEELER.DAVID.L.JR.1061036500
Date: 2016.09.08 16:52:23 +07'00'

DAVID L. PEELER, JR., Colonel, USAF
Deputy Director, Financial Management
Air Force Life Cycle Management Center

Providing the Warfighter's Edge

Appendix C. MyPers Survey Notification Email

View In HTML

This e-mail was sent from the myPers auto-notification system, please do not reply to this message.

1LT GALBRAITH,

The Air Force Institute of Technology is currently conducting a research effort on the 65F/65W officer career fields and is asking you to voluntarily participate in a 20-30 minute anonymous survey. The survey will assess each FM officer's desire to remain in the career field for a full career (20 years), as well as identify factors that might be contributing to their desire to separate/remain in the service. The survey is completely anonymous and voluntary; no effort will be made to identify individual respondents. This research aligns with current AF FM Military in Acquisition initiative (FMIA), with a goal to build robust FM officer presence within the acquisition community. The findings (again, completely anonymous) will be presented to senior Financial Management and Cost Analysis leaders.

Click here to access the survey.

The survey will be open until Friday, December 16th. If you have any questions about the research effort, please contact Lt Col Brandon Lucas or 1Lt Ginny Galbraith.

- My Profile
- My Messages/Incidents

myPers - Total Force Service Center
550 C Street West

myPers - Total Force Service Center
18420 E. Silver Creek Ave. Bldg 390 MS 68

Appendix D. Air Force Survey Office (AFPC/DSYS) Approval Letter

23 Nov 2016

MEMORANDUM FOR AFLCMC/FM-FZ
ATTENTION: Col David Peeler Jr

FROM: AFPC/DSYS
550 C Street West, Suite STE 152
Randolph AFB TX 78150-4451

SUBJECT: Survey Approval – Turnover Analysis AF Financial Management Cost Analysis 65X Career Fields Survey.

1. The survey is approved for use with the following population(s):

Population:	**Number(s):**
Air Force Officers	620
Air Force Active-Duty Enlisted	0
Air Force Civilians	0
Air Force Retirees and/or AF Family Members	0
Total Number to be Surveyed	620

The dates for survey administration are **11/23/2016** through **12/31/2016**; the Survey Control Number (SCN) for this effort is **AF17-016ACSP**.

Please ensure compliance with the following guidance, as applicable, while administering your survey.

a. Invitations to participate in the survey must include:

(1) Survey title (as shown in the subject line of this memo).

(2) AF Survey Control Number (SCN).

(3) Statement that completion of the survey is voluntary.

(4) Link to the list of Air Force approved surveys: https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t0ECF2BB847D139300147D55307A100E2&channelPageId=sE3494DD04562FCC901456BE0545C017A.

(5) Government contact name or office, with official contact information (e.g., e-mail address, telephone number, etc.), to provide a point of contact for questions about the survey.

(6) Identifying information of the survey's sponsor, to inform survey recipients under whose authority the survey is being conducted.

(7) All AF attitude and opinion surveys must include the following statement on the questionnaire: "We cannot provide confidentiality to a participant regarding comments

involving criminal activity/behavior, or statements that pose a threat to yourself or others. Do NOT discuss or comment on classified or operationally sensitive information."

b. This approval is exclusive to the Air Force community and does not constitute authority for administration to individuals from other federal agencies, sister services, etc. Surveys that include individuals from outside the Air Force community must be coordinated through the DOD/WHS/ESCD Information Management Division (commercial phone 703-696-5284).

c. The organization conducting this survey must contact the Civilian Personnel Office; Civilian Personnel Element, Manpower & Personnel Flight; for labor union notification prior to releasing this survey if any participants are civilian employees of a bargaining unit. If this survey involves bargaining unit civilians at more than one base, the organization conducting this survey must notify HQ AFPC/DPIECC, Air Force Program Management and Evaluation.

d. The organization conducting this survey must insure that if this survey requires any changes, request must be submitted to the Survey Office for review and approval prior to implementation in accordance with AFI 38-501.

e. If this survey requires an IRB, the PI must submit all proposed survey changes to the Survey and IRB Office for review and approval (minor changes do not require a change of SCN number) prior to implementation in accordance with AFI 38-501.

f. AFI 33-115, governs Web Management and Internet usage of websites hosted in the commercial environment (i.e., ".com", ".org", etc.). The organization conducting this survey is responsible for insuring compliance with web management and usage requirements. Questions should be directed to SAF/A6 (usaf.pentagon.saf-cio-a6.mbx.a3cs-a6cs-strategy-and-policy@mail.mil).

g. For information regarding digital certification of e-mails, refer to AFI 33-119, *Air Force Messaging*. The reference for PK enabling (PKE) information is https://afpki.lackland.af.mil/html/pkenabling.cfm. For information pertaining to ".mil" accounts, the reference is https://afpki.lackland.af.mil/html/help_desk.cfm. Information for systems that are not ".mil" can be found at http://iase.disa.mil/pki/eca/. For information on External Certificate Authority or to contact a representative, the reference is http://iase.disa.mil/pki/eca/contact_us.html.

h. The organization conducting this survey must ensure its Operations Security (OPSEC) manager reviews this survey prior to administration. References for the OPSEC Program include: DOD Directive 5205.02, *DOD Operations Security Program*; Joint Publication 3-13.3, *Operations Security*; AFPD 10-7, *Air Force Information Operations*; and AFI 10-701, *Operations Security (OPSEC)*.

i. The public may request survey results under provisions of the Freedom of Information Act (FOIA). Results released outside the Air Force require coordination with Air Force Public Affairs prior to dissemination.

j. Data collected under this survey may be subject to the Privacy Act of 1974. Please ensure compliance with this act as set forth in Title 5 United States Code (USC), Sec 552a; Title 10

USC, Sec 55 and 8013; Executive Order 9397; and Air Force Instruction 33-332, *Privacy Act Program*.

2. If you have any questions, please call the Air Force Survey Office at DSN 665-2776 or send an e-mail to afpc.dsys.af.surveyoffice@us.af.mil.

//Signed//
RENEE TEALER
Management Analyst
Air Force Survey Office

Appendix E. Notification to Senior FM Leaders

BACKGROUND PAPER

ON

FINANCIAL MANAGEMENT & COST ANALYSIS OFFICER RETENTION STUDY

PURPOSE:
This paper addresses the purpose and objectives of a proposed research study to be conducted on the Air Force's Financial Management and Cost Analysis officer career fields. |

DISCUSSION:

- The 65Fx and 65Wx officer workforces have been facing a shortage of Field Grade Officers (FGOs) in recent years. No in-depth research has been conducted on the current workforce in regards to their turnover intentions, or in other words, their desire to remain in the service for a full career (20 years).

  -- The primary objective of this study is to identify what factors contribute towards influencing an officer to decide to remain in the service or voluntarily separate from the service.

  -- The study will involve surveying the entire 65Fx and 65Wx officer workforce via an online survey instrument. The survey will be completely voluntary and anonymous. No PII will be collected and no effort to identify a specific respondent will be made. The study will assess how various demographic factors such as commissioning source, age, marital status, current job duty, and gender influence an individual's turnover intentions. The survey will also address constructs such as organizational commitment, perceived availability of civilian job alternatives, and employee burnout and analyze their impacts on turnover intentions.

  -- The study will also assess whether or not there exists a significant difference in the turnover intentions of 65Fx and 65Wx officers who have completed the AFIT Master's of Cost Analysis (GCA) graduate program versus officers who did not participate in the program. The findings may assist in determining the most effective number of slots to allot to the AFIT GCA program.

- The study will be conducted by Lieutenant Colonel Brandon Lucas (the Director of the AFIT Graduate Cost Analysis Program) and First Lieutenant Virginia Galbraith. The research effort is currently being sponsored by Colonel David Peeler from the Air Force Life Cycle Management Center.

  -- The research effort aligns with current Financial Management in Military Acquisition (FMIA) efforts, with a goal to robust FM officer presence within the acquisition community.

  -- The findings will be presented to senior Financial Management and Cost Analysis leaders and arm them with vital information regarding the values and career intentions of their current workforce, as well as assist in projecting future manpower levels and informing relevant decisions.

- If you have any questions about this research effort, please contact Lt Col Brandon Lucas Phone DSN: 785-3636 ext. 4441; Commercial: 937-255-3636 ext. 4441; Email Brandon.Lucas@afit.edu.

Lt Col Brandon Lucas/AFIT/ENV/DSN 785-3636 ext. 4441/bml/20 Oct 16

Appendix F. Online Survey Instrument

You are being asked to participate in a research effort currently being conducted at the Air Force Institute of Technology. Your participation is completely ***voluntary*** and will consist of completing an ***anonymous*** 20-30 minute online questionnaire. All active duty Air Force Financial Managers (65F) and Cost Analysts (65W) will be asked to participate in this study. Approximately 600 subjects will be enrolled in this study. The purpose of this research is to identify factors that influence Air Force 65X officers to separate from the active duty instead of pursue 20-year careers. The research aligns with current Financial Management Military in Acquisition (FMIA) initiatives, and the findings will be presented to senior Financial Management and Cost Analysis leaders.

The survey data will be kept confidential. Personal identifiers such as name and social security number will not be asked for. Certain demographic data such as age, gender, marital status, time-in-service, and commissioning source will be collected in order to compare the current 65X workforce with historical data on 65X officers that have already separated or retired within the years 1991-2016. In no way will the demographic data be analyzed to determine the identity of individual participants. However, we cannot provide confidentiality to a participant regarding comments involving criminal activity/behavior, or statements that pose a threat to yourself or others. Do NOT discuss or comment on classified or operationally sensitive information.

The final research report will be made available via the Air Force Institute of Technology (AFIT) and the Defense Technical Information Center (DTIC). Findings may also be published in related journals or publications. The research team does not foresee any physical discomforts or potential medical risks to participants undergoing this research effort. You will not receive any direct benefits from participating in this study. You will not receive any compensation for voluntarily participating in this study. You may choose not to participate in this study. Again, the decision to participate in this research is completely voluntary. No efforts will be made to coerce or intimidate you into participating in this study.

Lt Col Brandon Lucas or **1Lt Virginia Galbraith** will adequately answer any and all questions you have about this study, your participation, and the procedures involved. They can be reached at (937) 255-3636 ext. 4441 or via email (Brandon.Lucas@afit.edu and Virginia.Galbraith@afit.edu).

Air Force Survey Control Number (SCN): AF17-016ACSP. Link to the list of Air Force approved surveys: https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t0ECF2BB847D139300147D55307A100E2&channelPageId=sE3494DD04562FCC901456BE0545C017A.
Survey Sponsor: Colonel David Peeler (AFLCMC/FM)

YOU ARE MAKING A <u>VOLUNTARY</u> DECISION TO PARTICIPATE IN THIS STUDY. BY COMPLETING AND SUBMITTING THIS QUESTIONNAIRE, YOU ARE INDICATING THAT YOU HAVE READ AND AGREE TO THE INFORMATION ABOVE.

1

Please read each question and indicate your response using the scale provided for each question, *in regards to the past 9 months...*

1. How often have you considered leaving the active duty Air Force (upon completion of your service commitment)?

1 - Never	2 - Rarely	3 - Sometimes	4 - Very Often	5 - Always
○	○	○	○	○

2. To what extent is your current job satisfying your personal needs?

1 - To No Extent	2 - To a Slight Extent	3 - To a Moderate Extent	4 - To a Large Extent	5 - To A Very Large Extent
○	○	○	○	○

3. How often are you frustrated when not given the opportunity at work to achieve your personal work-related goals?

1 - Never	2 - Rarely	3 - Sometimes	4 - Very Often	5 - Always
○	○	○	○	○

4. How often do you dream about getting another job (outside of the active duty Air Force) that will better suit your personal needs?

1 - Never	2 - Rarely	3 - Sometimes	4 - Very Often	5 - Always
○	○	○	○	○

5. How likely are you to accept a civilian job at the same compensation level should it be offered to you (upon completion of your service commitment)?

1 - Highly Unlikely	2 - Slightly Unlikely	3 - Somewhat Likely	4 - Likely	5 - Highly Likely
○	○	○	○	○

6. How often do you look forward to another day at work?

1 - Never	2 - Rarely	3 - Sometimes	4 - Very Often	5 - Always
○	○	○	○	○

7. I aim to serve at least 20 years in the active duty Air Force.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree	N/A (I already have 20 or more years in service).
○	○	○	○	○	○	○

2

8. I plan to look for a new job outside of the Air Force towards the end of my service commitment.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

9. I plan on working in the active duty Air Force beyond my current service commitment.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

3

Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they work. With respect to your own feelings about the particular organization for which you are now working, the United States Air Force, please indicate the degree of your agreement or disagreement with each statement by checking one of the six alternatives below each statement.

10. I am willing to put in more effort than expected in order to help this organization succeed.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

11. I talk up this organization to my friends as a great place to work for.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

12. I feel very little loyalty to this organization.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

13. I would accept almost any assignment in order to keep working for this organization.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

14. I find that my values align very similarly with the Air Force's values.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

15. I am proud to tell people outside of the Air Force that I am part of this organization.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

16. I could just as well be working for a different organization as long as the type of work was similar.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

17. This organization really inspires the very best in me in the way of job performance.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

18. It would take very little change in my present circumstances to cause me to leave this organization [after my Active Duty Service Commitment (ADSC)].

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

19. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

20. There's not too much to be gained by sticking with this organization indefinitely.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

21. Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

22. I really care about the fate of this organization.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

23. For me, this is the best of all possible organizations for which to work.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

24. Deciding to work for this organization was a definite mistake on my part.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

Listed below are a series of statements that represent possible feelings that individuals might have towards their day-to-day job duties and responsibilities. Please indicate the degree of your agreement or disagreement with each statement by checking one of the six alternatives below each statement.

25. I frequently find my work to be interesting.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

26. There are days when I feel tired prior to arriving to work.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

27. Often, I talk about my work in a negative way.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

28. After work, I tend to need more time than in the past in order to relax and feel better.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

29. I can tolerate the pressure that my work brings.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

30. Lately, I tend to think less at work and do my job almost mechanically.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

31. I find my work to be a positive challenge.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

32. During my workday, I often feel emotionally drained.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

33. Over time, someone can become disconnected from this type of work.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

34. After working, I have enough energy for my leisure activities.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

35. After my workday, I usually feel worn out and weary.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

36. This is the only type of work that I can imagine myself doing.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

37. I can manage the amount of work assigned to me.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

38. I feel more and more engaged in my work.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

39. When I work, I feel energized.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

Please indicate the degree of your agreement or disagreement with each statement by checking one of the six alternatives below each statement.

40. There simply aren't very many jobs for people like me in today's civilian job market.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

41. Given my qualifications and experience, getting a new job (outside of the Air Force) would not be very hard at all.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

42. I can think of a number of organizations that would probably offer me a job if I were looking.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

43. If I looked for a job, I would probably wind up with a *better* job than the one I have now.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

44. By and large, the jobs I could get if I left the active duty Air Force are *superior* to the job I have now.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

45. Most of the jobs I could get would be an *improvement* over my present circumstances.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

46. I have a far-reaching "network" of contacts, which could help me find out about other job opportunities.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

47. I have contacts in other companies who might help me line up a new civilian job.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

48. My work tends to bring me in contact with a number of people who might help me line up a new civilian job.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

49. Right now, I have a job offer "on the table" from outside of the active duty Air Force, if I choose to take it.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

50. I have found a better alternative than my present job.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

51. After I complete my service commitment, I would be unable to move to another place of residence even if a better job came along - due to personal reasons.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

52. My spouse's career makes it very difficult for me to leave this organization.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree	N/A, I do not have a spouse.
○	○	○	○	○	○	○

53. There are factors in my personal life (e.g., school age children, relatives, etc.) which make it very difficult for me to leave the Air Force after my service commitment.

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
○	○	○	○	○	○

54. Age

55. Gender

1 = Female
2 = Male

56. Are you prior enlisted?

1 = Yes
2 = No

57. Current Rank

1 = 0-1; 2 = 0-2, etc

58. Time In Service (Years)

1 = <1yr, 2 = 1yr, 3 = 2yrs, 4 = 3yrs, etc

59. Commissioned Years in Service

1 = <1yr, 2 = 1yr, 3 = 2yrs, 4 = 3yrs, etc

60. Commissioning Source

1 = ROTC 2= USAFA 3 = OTS.... 0 = other

61. Marital Status

1=Single
2= Married to Civilian
3 = Married to Military
4 = Divorced
5 = Widowed

62. Number of Children in Household

1 = 0kids, 2 = 1 kid; etc

63. Are you currently stationed OCONUS?

Yes

No

1 = yes
2 = No

10

64. In regards to your career, up-to-date, which field have you spent the**majority** of your career working in?

- ◯ 65F (Operations & Maintenance - O&M) 1
- ◯ 65F (Acquisition Budget) 2
- ◯ 65W (Cost Analysis) 3
- ◯ Other (Career Broadening, Special Duty, AFIT GCA Student, AFIT CI Student, Instructor Duty, XO, etc). Please specify:

[ ] 0 = other

65. In regards to your **current** assignment, which career field are you working in?

- ◯ 65F (Comptroller Squadron) 1
- ◯ 65F (Acquisition Budget) 2
- ◯ MAJCOM or Air Staff 3
- ◯ 65W (Cost Analysis) **5**
- ◯ Other (Career Broadening, Special Duty, AFIT GCA Student, AFIT CI Student, Instructor Duty, XO, etc). Please specify:

[ ] 0 = other

66. Are you currently stationed in any of the following locations: Hanscom AFB, Los Angeles AFB, the DC area, or Wright Patterson AFB? If so, please specify which location.

- ◯ No **1**
- ◯ Yes, Hanscom AFB **2**
- ◯ Yes, Los Angeles AFB **3**
- ◯ Yes, DC area (AFCAA, Pentagon, etc) **4**
- ◯ Yes, Wright Patterson AFB **5**

67. Are you currently deployed?

- ◯ Yes **1**
- ◯ No **2**

68. Have you completed any deployments?

- ◯ No **1**
- ◯ Yes. Please specify the number of deployments: **0 = yes**

[ ]

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69. Are you currently enrolled in or have you already completed the AFIT GCA Master's degree program?

- ◯ Yes 1
- ◯ No 2

70. Are you currently enrolled in or have you already finished a graduate degree program (other than the AFIT GCA Program)?

- ◯ Yes, I am currently pursuing a graduate degree (other than the AFIT GCA degree). 1
- ◯ Yes, I have already completed a graduate degree (other than the AFIT GCA degree). 2
- ◯ No. 3

71. Are you interested in applying for the AFIT GCA Master's degree program?

- ◯ Yes
- ◯ No
- ◯ N/A, I have already been accepted to the incoming AFIT GCA class for August 2017.

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72. Please specify reasons as to why you did not want to pursue the program when you were in the eligibility window. Or, if you are currently within the eligibility window, why do you not want to pursue the program?

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
I dislike the assignment location of Dayton, Ohio.	○	○	○	○	○	○
I already have/am already pursuing a graduate degree.	○	○	○	○	○	○
I did not/do not want to go back to school at all.	○	○	○	○	○	○
I did not/do not want an AFIT graduate degree in Cost Analysis.	○	○	○	○	○	○
I did not/do not want to incur the Active Duty Service Commitment associated with attending AFIT.	○	○	○	○	○	○
I did not/do not want to work in the Cost Analysis career field.	○	○	○	○	○	○
The assignment did not/does not align well with my personal life (spouse, children, etc).	○	○	○	○	○	○
The assignment did not/does not align well with my professional goals.	○	○	○	○	○	○
I did not/do not feel as if I would succeed academically in the AFIT program.	○	○	○	○	○	○
I did not know about the AFIT GCA Master's degree program.	○	○	○	○	○	○

Other (please specify):

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73. Would you like to leave any feedback or additional comments about this survey, either to the research team or to senior FM leadership? If so, please write your comments in the text box below.

74. Do you have any suggestions or comments on what the Air Force or FM career field can do in order to increase your desire to remain in the service for a full 20-year career? If so, please write your comments in the text box below.

Please make sure to press the "Submit Survey" button below upon completion. Thank you!

Appendix G. Descriptive Statistics for Hypothesis 3

Descriptives

		N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Min	Max
EaseofMovement	AFIT GRAD	50	5.2067	.76751	.10854	4.9885	5.4248	3.67	6.00
	NOT AFIT	185	5.1279	.84046	.06179	5.0060	5.2498	2.00	6.00
	Total	235	5.1447	.82452	.05379	5.0387	5.2506	2.00	6.00
DesirabilityofMovement	AFIT GRAD	50	3.8200	1.22003	.17254	3.4733	4.1667	1.00	6.00
	NOT AFIT	185	3.8144	1.23644	.09090	3.6351	3.9938	1.00	6.00
	Total	235	3.8156	1.23037	.08026	3.6575	3.9737	1.00	6.00
Networking	AFIT GRAD	50	4.0600	1.10798	.15669	3.7451	4.3749	1.00	6.00
	NOT AFIT	185	4.0739	1.09012	.08015	3.9157	4.2320	1.00	6.00
	Total	235	4.0709	1.09157	.07121	3.9306	4.2112	1.00	6.00
CrystallizationofAlt	AFIT GRAD	50	2.3600	1.53211	.21667	1.9246	2.7954	1.00	6.00
	NOT AFIT	185	2.2108	1.31830	.09692	2.0196	2.4020	1.00	6.00
	Total	235	2.2426	1.36450	.08901	2.0672	2.4179	1.00	6.00
Mobility	AFIT GRAD	40	5.1250	1.00338	.15865	4.8041	5.4459	2.67	6.00
	NOT AFIT	139	5.1127	1.05299	.08931	4.9361	5.2893	1.00	6.00
	Total	179	5.1155	1.03934	.07768	4.9622	5.2688	1.00	6.00

Bibliography

Air Force Personnel Center. *Air Force Personnel Statistics*. Officer Demographics Report. 01 July 2016. Retrieved on 01 Aug 2016.

Air Force Personnel Center. "Request for Information." Electronic Message. 22 July 2016.

Anastasi, A. *Psychological testing* (6th ed). New York: Macmillan, 1988.

Beck, Derek W. *An Analysis of Retention Issues of Scientists, Engineers, and Program Managers in the US Air Force.* MS Thesis. Massachusetts Institute of Technology, Cambridge MA, 2005 (60503228-MIT).

Bothma, C.F.C., & Roodt, G. The valida on of the turnover inten on scale. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, *11*(1), Art. #507, (2013).

Cohen, Jacob. "A Power Primer." *Psychological Bulletin*, 112.1 155-59 (1992).

Colquitt, J. and others. *Organizational Behavior: Improving Performance and Commitment in the Workplace*. New York: McGraw-Hill Irwin, 2011.

Department of Defense. *The Eleventh Quadrennial Review of Military Compensation.* RefID: 3-80904F8. Washington, 2012.

Department of the Air Force. *Active Duty Service Commitments*. AFI 36-2107. Washington: HQ AF/A1P, 30 April 2012.

Demerouti, E., & Bakker, A. B. "The Oldenburg Burnout Inventory: A Good Alternative to Measure Burnout and Engagement," *Handbook of Stress and Burnout in Health Care*, Hauppauge, NY: Nova Science (2008).

Falk, Sayce & Sasha Rogers. "Junior Military Officer Retention: Challenges and Opportunities." MPP Policy Analysis Exercise to John F. Kennedy School of Government, Harvard University, Cambridge MA, March 2011.

George, D., & Mallery, P. *SPSS for Windows Step by Step: A Simple Guide and Reference. 11.0 Update (4th ed.).* Boston: Allyn & Bacon, 2003.

Gliem, Joseph A. and Gliem, Rosemary R. "Calculating, Interpreting, and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales," *2003 Midwest Research to Practice Conference in Adult, Continuing, and Community Education***.** Columbus OH, 2003.

Goodman, E., & Boss, R. "The Phase Model of Burnout and Employee Turnover," *Journal of Health and Human Services Administration*, 25(1), 33-47 (2002).

Griffeth, R. and others. "The Development of a Multidimensional Measure of Job Market Cognitions: The Employment Opportunity Index (EOI)," *Journal of Applied Psychology*, 90(2): 335-349 (2005).

Headquarters Air University. "Request for Information." Electronic Message. 27 July 2016.

Holtom, B. C. and others. "Chapter 5: Turnover and Retention Research: A Glance at the Past, a Closer Review of the Present, and a Venture into the Future," *The Academy of Management Annuals*, 2(1), 231-274 (2008).

"Lateral Recruitment." *HR Helpboard*. HR Helpboard, 2016. Retrieved on10 October 2016.

Maslach, C. "Understanding Burnout: Definitional Issues in Analyzing a Complex Phenomenon," *W. S. Paine (Ed.) Job stress and burnou*t, (pp. 29-40). Beverly Hills, CA: Sage (1982).

Maslach, C., & Jackson, S. E. "Burnout in Organizational Settings," *Applied Social Psychology Annual*, 5, 133-153 (1984).

Maslach, C. and others. *Maslach Burnout Inventory*. (3rd ed.). Palo Alto, CA: Consulting Psychologists Press (1996).

"Maslach Burnout Inventory." *MindGarden.Com*. Mind Garden, Inc. Retrieved on 10 November 2016.

"Measures of Skewness and Kurtosis." *Engineering Statistics Handbook*. NIST/ SEMATECH, n.d. Retrieved on 26 December 2016.

Military Compensation and Retirement Modernization Commission. "Explaining the Blended Retirement System." 25 June 2015. Retrieved on 28 January 2016.

Patten, Mildred L. *Understanding Research Methods: An Overview of the Essentials*. 7th ed. Abingdon: Routledge, 2009.

"Pearson Product-Moment Correlation." Laerd Statistics. Lund Research Ltd. 2013. Retrieved on 27 December 2016.

Phillips, Jack J., & O'Connell, A. *Managing Employee Retention: A Strategic Accountability Approach*. Amsterdam: Butterworth-Heinemann, 2003.

Porter, L. W. and others. “Organizational Commitment, Job Satisfaction, and Turnover Among Psychiatric Technicians,” *Journal of Applied Psychology*, 59, 603-609, (1974).

Riddel, Kevin C. *An Analysis of Factors that Influence Air Force Civil Engineer Company Grade Officer Turnover Intentions*. MS Thesis, AFIT/GEM/ENV/10-M10. Graduate School of Engineering and Management, Air Force Institute of Technology (AU), Wright-Patterson Air Force Base OH, March 2010 (ADA522754).

Ruiz, Gina. “Study: Keeping Young Talent Won’t Be Easy.” Workforce Management, October 22, 2007.

Shaw, J. D. and others. “An Organization-Level Analysis of Voluntary and Involuntary Turnover,” *Academy of Management Journal*, 41(5), 511-525 (1998).

“SPSS FAQ”. UCLA: Statistical Consulting Group. 14 Jan 2007. Retrieved on 01 December 2016.

"SPSS Tutorials: One-Way ANOVA." LibGuides. Kent State University Libraries, 2016. Retrieved on 02 Jan. 2017.

"SPSS Tutorials: Pearson Correlation." LibGuides. Kent State University Libraries, 2016. Retrieved on 02 Jan. 2017.

United States Air Force. *Financial Management and Comptroller*. SAF/FM, 2017. Retrieved on 10 January 2017.

United States Air Force. *USAFA Quick Facts*. United States Air Force Academy, 21 March 2016. Retrieved on 10 November 2016.

United States General Accounting Office. *Officer Commissioning Programs: More Oversight and Coordination Needed.* Report B-247696. Washington: General Accounting Office, November 1992.

Vita

First Lieutenant Virginia L. Galbraith graduated from Armijo High School in Fairfield, California in 2009. She entered undergraduate studies at the United States Air Force Academy in Colorado Springs, Colorado. She graduated with a Bachelor of Science degree in Management, earning the Distinguished Management Major award, in May 2013 and was commissioned as a second lieutenant in the active duty Air Force.

Her first assignment was to the 100th Comptroller Squadron at Royal Air Force (RAF) Mildenhall, United Kingdom in August 2013. At this assignment she served in a variety of roles such as: financial services flight commander, financial analysis deputy flight commander, unit fitness program manager, Wing Staff Agency (WSA) deployment manager, and WSA resource advisor. She completed the Basic Financial Management Officer Course (BFMOC) at Keesler Air Force Base, Mississippi where she earned the Distinguished Graduate award in December 2013.

In November 2016, she earned a Master of Business Administration from Indiana University. In August 2016, she began studies at the Air Force Institute of Technology where she pursued a Master of Science in Cost Analysis degree. Upon completion of the program, she will be stationed at Los Angeles Air Force Base, California as a cost analyst.

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14. ABSTRACT
There is currently a shortage of field grade officers within the United States Air Force's Financial Management and Cost Analysis (65Fx/65Wx) career field. A questionnaire was distributed to all officers within the career field (N = 618) in order to identify the values and career intentions of the career field's current officer workforce. Constructs such as organizational commitment, burnout, and perceived availability of civilian job opportunities were analyzed to determine their impacts on an officer's turnover intentions. Demographics such as commissioning source, current job type, current job location, and time in service were also analyzed to see how they may impact long-term career intentions. Results of this survey indicated that first lieutenants expressed the lowest desire to serve for at least 20 years, had the highest levels of burnout, and the lowest organizational commitment levels. The research team also analyzed whether or not a significant difference exists between officers who have completed the Air Force Institute of Technology's Graduate Cost Analysis (GCA) program and officers who have not completed the program – in terms of burnout, organizational commitment, and perceived availability of job alternatives. No significant differences were found between the two groups of 65Fx/65Wx officers.

15. SUBJECT TERMS
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