Spring 2018

Motivating and Enabling Factors for Military Service Members Earning a Post-Secondary Degree

Rossie Dean Johnson
Old Dominion University, rossie.johnson@gmail.com

MOTIVATING AND ENABLING FACTORS FOR MILITARY SERVICE MEMBERS

EARNING A POST-SECONDARY DEGREE

by

Rossie Dean Johnson

B.S. May 1988, Saint Paul's College
M.S.A. May 1998, Central Michigan University

A Dissertation Submitted to the Faculty of

Old Dominion University in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF PHILOSOPHY

EDUCATION

OLD DOMINION UNIVERSITY

MARCH 12, 2018

Approved by:

Philip A. Reed, (Director)

Petros Katsioloudis, (Member)

Ginger S. Watson, (Member)

ABSTRACT

MOTIVATING AND ENABLING FACTORS FOR MILITARY SERVICE MEMBERS
EARNING A POST-SECONDARY DEGREE

Rossie Dean Johnson
Old Dominion University, 2018
Director: Dr. Philip A. Reed

The purpose of this study was to investigate what motivated and enabled military service members to earn a post-secondary degree. This problem was investigated to better inform institutions of higher education regarding how to recruit and retain military-affiliated members and how to provide career-enhancing information to service members at institutions of higher education.

Education for military service members was a process that facilitated the growth, learning, and maturity of individuals in an effort to achieve their goals while simultaneously achieving the collective goals of the organization. This study sought to identify the enabling and motivating factors that empowered service members to surpass the obstacles that impeded their processes in obtaining degrees from institutions of higher education. Motivating factors pertained to those enhancements and experiences that supported service members' awareness, knowledge, continuous improvement, and perseverance in a consolidated effort to promote educational success and well-being (Preston & Claypool, 2013). Enablers were identified as the attitudes, behaviors, and factors that provide the opportunities for service members to become associated with the academic environment and to advance intellectually from the instruction (DiPerna, 2004).

The study utilized an electronic survey that included closed-form Likert-type items with a 5-item response scale, open-form questions, and demographic questions to obtain data on

motivational and enabling factors that pertained to service members seeking post-secondary degrees. The survey was electronically distributed to 781 service members; 141 (18%) service members responded to the survey of which, 114 were eligible to provide input. The researcher used Statistical Package for the Social Sciences (SPSS), Version 24, to conduct analysis. Descriptive data was obtained from SPSS and a multiple regression analysis method was used to compare the 10 independent service member motivating variables and the eight independent service member enabling variables.

A regression model assisted in predicting significance for motivation. The results indicated that "Assist me in achieving personal growth" was a significant motivator for service members earning a post-secondary degree. A regression model was not significant in predicting enablers. There were no signinficant enablers for service members earning a post-secondary degree. The researcher however, indicated that descriptive statistics and literature supported at least two of the enablers being significant for service members earning a post-secondary degree.

Findings from this study would serve as crucial information for service members seeking to earn post-secondary degrees; institutions of higher education can use the information to assist in recruiting and retaining degree seeking service members. Administrators, faculty, and staff personnel in the higher education profession may, also, refer to this study as well as military leaders that provide counsel to subordinate service members.

This is dissertation is dedicated to all of those who never quit and persevered to the end.

When you're up against a trouble,
Meet it squarely, face to face;
Lift your chin and set your shoulders,
Plant your feet and take a brace.
When it's vain to try to dodge it,
Do the best that you can do;
You may fail, but you may conquer,
See it through!

Black may be the clouds about you
And your future may seem grim,
But don't let your nerve desert you;
Keep yourself in fighting trim.
If the worst is bound to happen,
Spite of all that you can do,
Running from it will not save you,
See it through!

Even hope may seem but futile,
When with troubles you're beset,
But remember you are facing
Just what other men have met.
You may fail, but fall still fighting;
Don't give up, whate'er you do;
Eyes front, head high to the finish.
See it through!

By Edgar Albert Guest

ACKNOWLEDGEMENTS

I want to thank my Lord and Savior for all of the blessing he has bestowed upon my family and me. I owe all my accomplishments to him. His grace and mercy are everlasting and his word endures forever. With all of this, I am truly thankful for his goodness.

Thank you to the ODU faculty for their outstanding instruction throughout my doctoral program. I appreciate the collective manner which you all stimulated my intellect by inspiring me to take my thought processes to a higher level. I sincerely hope I was capable of imparting some knowledge upon you in the same manner which you delivered it.

I want to thank Dr. John Ritz for being my first advisor in my doctoral program. You assisted by getting me started in this academic journey and helped develop my entire curriculum schedule. Early in the program, I often wondered how I would ever complete the academic hours and course requirements. You advised me to just focus on one semester at a time. I wish you all the best in your retirement. You are indeed a distinguished scholar and a true educational professional.

I want to thank my "dream team" of a committee whom I personally selected based upon my observations of each one's individual character and commitment to excellence. Dr. Philip Reed, you were an awesome advisor and committee chair. I thank you for your dedication and for your outstanding leadership in the doctoral program and within the committee. Your reassurance of my scholastic competences was the motivation for me to continuously improve. Thank you for inspiring me to go further. I am so very thankful to Dr. Ginger Watson. The approaches you used to assist me in simplifying the most complex research methods were extraordinarily incredible. I am fortunate to have had you on my committee and through our

many discussions, I can attest that have learned so much from you. Thank you for being a true champion for me. Dr. Petros Katsioloudis, with all of your inherent responsibilities associated with the being the program director, you embarked on the challenge to assist me by serving as a committee member. I appreciate your personal commitment to me. The willingness you displayed was indicative of the devotion you have toward the education profession. I want to thank you all for reaffirming my choice for selecting you for my committee; you all were simply the best and because of you, I am a better scholar.

I want to thank my Virginia higher education colleagues, Ms. America Luna and Mr. Michael Murphy. Your support helped relieve my angst during a most crucial point during the dissertation process. I appreciate the assistance from you both.

I want to thank Drs. Gerald Burton, Kenneth Lewis, and Brenda Shelton for their advising and tutoring support. Many thanks, as well, go to Ms. Gail Briley for the long hours we endured with the professional editing assistance. Huge thanks go to Dr. Cortez Dial for all of his personal time used to provide profound career and personally enhancing counsel throughout the entire doctoral process. I am absolutely obliged to you all.

Big thanks go to Delta Omega Chapter, the Third District, and the International Headquarters of the Omega Psi Phi Fraternity, Inc. The support given was definitely more than I could have ever envisioned. I hope my accomplishments assist in elevating the brand of our organization and that it inspires other members to scholastically achieve.

I want to thank my in-laws Oliver and Romaine Nelson for their support. Thank you to my extended family. I thank my Aunt Ethel Johnson for always calling to check on me and to ask how I was coming along. Thanks to my sister, Mandel Smith (who was also in school), her

husband Jerome and their children Jasmine and Jamie. Thank you to my mother, Mary, who still prays for me to this day, and to the memory of my father, Rossie Sr., who taught me the values of hard work which I still and will always live by.   Thank you all for your encouragement and for everything you have ever done over the years to support our family.

To my daughters Andrea and Alexandria and son Brandon, you are the best children any father could ask for. You observed my academic commitment during the late nights while I studied and as I worked on assignments throughout numerous weekends. You knew what I was doing was important and therefore, you did not complain when I did not have much time right then to share with you; you just simply understood. It is my hope that I was an impressionable example and that my actions lead to your appreciation of the value of education and lifelong learning. Thank you for your understanding and for your inquiry minds.

Finally, to my wife Adrienne. You have held everything together within our family over the years and continuously encourage me to keep going. I am eternally grateful for all of your immeasurable acts of kindness and for allowing me to "be me" with no questions asked. Even during the some of the most intense periods of my doctoral program, you agreed to "postponing" a couple of our anniversary dates to more conducive times (that was some *real* understanding) so that we could better enjoy our moments together. You are the most giving person I know and I am so tremendously blessed to have you. Thank you so very much for everything you do for us!

I truly hope this doctoral degree provides me the tools I can use to better serve others. It is, also, my desire that I can serve an inspiration and be an example for those who may also have ambitions of continuously improving themselves through education. Blessings to you all.

Rossie D. Johnson

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Figure   Page

CHAPTER I

INTRODUCTION

There were factors that motivated individuals to complete tasks they otherwise would not had accomplished. Individuals that exhibited such resilience had the belief in their capabilities to organize and execute the courses of action required to produce given attainments (Bandura, 1997). Perceived confidence, an element of self-efficacy, led individuals to inquire about accomplishing certain things (e.g., completing entrance examinations, getting accepted into college, attaining good grades) (Hughes, Galbraith, & White, 2011). Self-efficacy was the belief individuals had in their abilities to succeed throughout situations they encountered. An individual in such situations could have accomplished those requirements to attain admission into higher education to earn a post-secondary degree.

Individuals were motivated to achieve more and exhibited signs of self-actualization. Self-actualizers were those achieved or acted in a manner to attain their full potential as an individual (Maslow, 1968). When individuals had the desire to attend college, this signified their desire to improve themselves which displayed motivation and intrinsic values such as goodness, perfection, excellence, or simplicity (Maslow, 1969). Achieving full potential allowed individuals to attain better qualities of life which benefited them and their families. Earning a college degree was one way to achieve a better quality of life.

Americans believed in the importance of attaining a post-secondary education, with more than nine in ten (94%) saying that earning a post-secondary degree or credential was at least somewhat important and 70% saying it was very important (Calderon & Sorenson, 2014). Americans, as well, believed that attaining higher education had value because of the manner which it was linked to the increasing career opportunities thus improving their standard of living.

Calderon and Sorenson (2014), also, stated nearly three in four Americans (73%) agreed or strongly agreed that having a certification or degree that exceeded the level of the one attained in high school was essential for getting a good job and that most adults (74%) in the United States (U.S.) saw having a post-secondary degree or credential led to a better quality of life.

Wages of Americans without a degree had been falling while wages of college graduates were at an all-time high, increasing the value of obtaining a college degree despite the rising cost of an education (Karageorge, 2014). Between 1970 and 2013, workers with a bachelor's degree (excluding those who went on to a post-graduate degree) had annual earnings of about $64,500 after adjustment for inflation. Workers with an associate's degree earned an adjusted $50,000 per year, and those with only a high school diploma earned $41,000 per year (Karageorge, 2014). For over four decades, workers with a bachelor's degree earned on average 56% more than workers with an associate's degree who averaged 21% more than high school graduates (Abel & Dietz, 2014). The impact of a bachelor's degree on average individual economic results was well recorded (Gottlieb & Fogarty, 2003). Information attained from the U.S. Department of Labor, Bureau of Labor Statistics (2017) provided data that indicated when people graduated from college, they were, on average, much less likely to be unemployed as compared to people with less education and, when employed, had higher average earnings. See Table 1.

Table 1

Comparison of Earnings and Unemployment Rates by Educational Attainment

Education attained	Unemployment rate in 2016 (Percent)	Median weekly earnings in 2016
Doctoral degree	1.6	$1,664
Professional degree	1.6	1,745
Master's degree	2.4	1,380
Bachelor's degree	2.7	1,156
Associate's degree	3.6	819
Some college, no degree	4.4	756
High school (HS) diploma	5.2	692
Less than HS school diploma	7.4	504
All workers	4.0	885

Note: Adapted from U.S. Department of Labor, Bureau of Labor and Statistics (2017). Data represents individuals 25 years of age and older. Earnings are for full-time and salary workers.

Throughout history, adult education had been prevalent and influential in military training and education. The specific focus of military adult education efforts shifted to meet the changing needs of military learners (Persyn & Polson, 2012). For the military, adult education was a process that facilitated the growth, learning, and maturity of individuals as an effort to simultaneously achieve their goals as well as achieving the collective goals of the organization. This process was established on the belief that human capital was the most valuable asset when compared to technological capital, financial capital, and built capital (Zacharakis & Van Der Werff, 2012). There had been instances where institutions of higher education had supported adult education and provided programs that were beneficial to military personnel; those programs assisted in developing management and leadership skills which were critical for communication and problem solving (Zacharakis & Van Der Werff, 2012).

A major characteristic of military culture was the manner which service members were embedded within an environment where individual motivation was exemplified (Clemmons & Fields, 2011). Service members' motivational beliefs pertaining to learning tasks and positive

experiences were related to positive academic results (Artino, 2007). Furthermore, service members' self-reported task value, efficacy beliefs, and prior experience were significantly related to overall satisfaction, perceived learning, and self-reported choice behaviors (Artino, 2007, p. 197). This researcher sought to study the motivating and enabling factors that empowered service members to surpass the obstacles that impeded their processes in obtaining degrees from institutions of higher education.

Motivation involved being activated or energized to accomplish a specific goal or task (Ryan & Deci, 2000). Service members were motivated to gain an education because they knew that the potential outcome could have led to a good rating on their evaluation, a position of increased responsibility, or a promotion in rank (with an increase in salary) which all led to increased self-actualization and a higher sense of accomplishment. This was the deciding factor that opened new avenues of approach and afforded service members the opportunity to initiate the education process which bridged the gap between their desire to go to college and actually beginning the college admission process. Once service members were accepted and had been enrolled into a college or university, the efforts by the administrators, faculty, and institutional staff were important in embracing and welcoming the military students to the higher education environment. Service members who had the feeling that they were suited for the college or university setting were more apt to establish a rapport with the institution and had an increased chance of remaining, graduating, and pursuing further education (Kirchner, 2015).

Enabling factors were those variables that facilitated or allowed action for one to progress with an initiative (Chen, Welk, & Joens-Matre, 2014). Such change was often a factor that implied whether there were modifications in methods and procedures (Medina & Valdés, 2015). For the Department of Defense (DoD) which oversaw all military education programs, this had a

direct influence on changes in policy which affected budgetary resources as a most-crucial

enabler for service members' educational opportunities (U.S. Department of Defense, 2015).

Statement of the Problem

The purpose of this study was to investigate what motivated and enabled military service

members to earn a post-secondary degree. This problem was investigated to better inform

institutions of higher education on how to recruit and retain military-affiliated members and how

to provide career-enhancing information to service members at institutions of higher education.

Research Questions

This research was guided by the following research questions:

RQ$_1$: What factors motivated military service members to earn a post-secondary degree?

RQ$_2$: What factors enabled military service members to earn a post-secondary degree?

Background and Significance

During the period between the mid-1980s to mid-1990s, the overall military budget was

reduced by approximately $36 billion which resulted in the displacement of hundreds of

thousands of DoD personnel (Murdock, Crotty, & Sayler, 2012). Excessive spending, a massive

build-up of equipment and personnel, and the war in Southwest Asia had concluded. Congress

mandated that the numbers of personnel increased to support the U.S. military war build-up be

decreased. The exact number of service members who left the military and either gained

admittance into college or became unemployed as a result of this mandate was not known. The

number of new recruits whose enlistments were immediately terminated was, also, unknown

(Klaycamp, 2010).

The DoD had oversight of the U.S. Armed Forces and their roles in providing national

security (U.S. Department of Defense, 2015). It was generally perceived that a profession of

military service would eventually grant a service member retirement after he or she had served for a minimum of 20 years; that misnomer of a perception had never been guaranteed. The military had never assured any service member that he or she would be permitted to remain in the military for 20 years and to become eligible for a retirement after that many years of service to the nation (Kastenberg, 2013). Attrition was one of the most confounding problems of the military (White, Mullins, Rumsey, Nye, & LaPort, 2014); it could happen to any service member regardless of age, gender, rank, or years in the military.

A statement of the posture of the United States Army (McHugh & Odierno, 2015), submitted by the Secretary of the Army and the Chief of Staff of the Army to the Committees and Subcommittees of the United States Senate and the United States House of Representatives, 1st Session, 114th Congress, reiterated the previous year's testimony of the operational tempo; it highlighted the minimum force necessary to execute the defense strategy with 450,000 service members in the Regular Army. The Secretary of the Army and Chief of Staff of the Army further addressed that although the Bipartisan Budget Agreement (BBA) provided fiscal relief to the Army in Fiscal Year (FY) 14, the FY15 the Army budget would be decreased by $6 billion. With that budget decrease, the reduction of 40,000 service members from the approximate 490,000 currently on the Army's rolls was critical to be reached by FY17 (McHugh & Odierno, 2015).

Plans for a drawdown not only affected the Army, but it had impact on the other service branches and the individual service member; this, also, included those whom involuntarily separated. Leaders were not pleased when they were told that a service member from their command was identified to be separated (Verdun, 2014). Once a leader was informed that a service member was to be separated, the individual was required to personally notify the service

member, explain the separation process, and provide a range of options for his or her transition (Verdun, 2014). Service members that had the opportunity to complete their college degree while in the military had increased chances of finding civilian employment; this was all dependent upon their education level, experience, knowledge, and the skills gained while being in the military and while attending college (Kleykamp, 2010).

The life complexities that service members endured impacted their abilities to earn post-secondary degrees. Service members were on-call 24 hours a day, seven days a week; they faced potential deployments, relocations, and geographic family separations (Sanchez, Bray, Vincus, & Bann, 2004). A deployment may had been planned or was one of no-notice; it may had likewise been to locations within or outside of the United States. The duration of any deployment may or may not had been predetermined; deployments may had been disrupted to a way of life that Americans were accustomed to living. Regardless, service members were likely to experience multiple circumstances that affected them in transitioning into higher education (Jones, 2017).

The late 1800s presented the effects of service members returning from wars as dramatic historic military events. After World War II, the GI Bill and other education policies coincided with the increased presence of adult students in higher education (Kasworm, 2003). Furthermore, the return of service members from deployments was commonplace. A report from the U.S. Census Bureau (2013) stated that 21.8 million veterans lived in the United States; 92% of veterans aged 25 and older had at least a high school diploma; 26% had obtained a college degree. Wilson (2014) reported estimates of there being more than 21 million veterans of which 15 million or 71% had not earned a bachelor's degree. Military service members without post-secondary degrees were constantly returning home from Iraq, Afghanistan, and other war deployments and were likely to become unemployed civilians.

In an effort to support military service members and to assist them in earning college degrees, the Obama Administration, in 2015, announced a new initiative that addressed the post-secondary educational needs of military service members and improved their chances of post-military employment. "The 8 Keys to Success" (U.S. Department of Education, 2015) was an initiative that post-secondary institutions could enact to assist service members who were transitioning to higher education, completing their college programs, or were obtaining career-ready skills to ensure they were able to graduate and get good jobs. Since the announcement of this initiative, more than 250 community colleges and universities in 24 states and Washington, DC, had implemented "The 8 Keys to Success" initiative to assist student veterans on their campuses. The initiative, as presented by the U.S. Department of Education (2015), was as follows:

1. Create a culture of trust and connectedness across the campus community that promoted well-being and success for veterans.

2. Ensure consistent and sustained support from campus leadership.

3. Implement an early alert system that ensured all veterans receive academic, career, and financial advice before challenges become overwhelming.

4. Coordinate and centralize campus efforts for all veterans, together with the creation of a designated space for them (even if limited in size).

5. Collaborate with local communities and organizations, including government agencies, which would align and coordinate various services for veterans.

6. Utilize a uniform set of data tools that would collect and track information on veterans, including demographics, retention, and degree completion.

7. Provide comprehensive professional development for faculty and staff on issues and challenges unique to veterans.

8. Develop systems that ensured sustainability of effective practices for veterans (U.S. Department of Education, 2015, Retrieved from http://www.ed.gov/veterans-and-military-families/8-keys-success-sites).

To support the increased number of military service members on college and university campuses, many institutions hired personnel devoted to providing services specifically to this population (O'Herrin, 2011). Understanding the service culture was critical for the recruiting and admission goals of colleges and universities that served a military population. Many institutions provided programs and services specifically designed for service members which were part of the institution's long-term strategic plan. Public four-year and public two-year institutions were more likely to have had programs specifically designed for military veterans as compared to the private nonprofit colleges and universities (O'Herrin, 2011).

A number of military installations enlisted the aid of their education centers to assist service members with their transitions to college (Wilson, 2014). Education centers may have incorporated local colleges and universities into their office complexes with the purpose of being a connection between the university and the service member. Certain education centers, also, may have had academic advisors familiar with both the military and education benefits; in addition, they were familiar with the inter-workings of the services' education portals that provided records management, enrollment assistance with institutions of higher education, testing services, and service member counseling (Wilson, 2014).

Congress was concerned that service members were not afforded the same educational opportunities for academic achievement as their civilian counterparts. To provide the education

needed for service members to earn degrees at times separate from their appointed duty hours, DoD implemented voluntary education programs that enabled the opportunity (U.S. Government Federal Register, 2014). To assist service members in taking full advantage of the opportunities that voluntary education programs offered, the service branches provided an amount that was not to exceed $250 per semester-hour (or equivalent) tuition assistance for their service members. A maximum allowance of $4,500 per fiscal year enabled those service members that took advantage of the voluntary education program by attending a regionally or nationally accredited institution of higher education during their off-duty time (U.S. Government Federal Register, 2014). To maintain compliance with established standards, all institutions of higher education that partnered in support of the voluntary education programs were required to sign a uniformed memorandum of understanding between them and DoD. This ensured that the institutions of higher education understood their roles and were knowledgeable of the stipulations which included being open and upfront of tuition and fees, the use of fair and honest recruiting practices, and providing academic support to service members that required assistance. With DoD providing the education programs and the institutions of higher education having an understanding of the programs' requirements, the service members had increased their awareness of the available educational opportunities that could assist them in earning post-secondary degrees (Wilson, Smith, Lee, & Stevenson, 2013); all of these were considered crucial in boosting service members' motivation and essential in demonstrating the available enablers for service members to earn post-secondary degrees.

In summary, although there were emerging programs dedicated to assisting service members with their efforts to enroll into institutions of higher education, there was still a need to ensure that all stakeholders were aware and taking advantage of the opportunities. It was

important to identify those factors that motivated service members to attain post-secondary degrees as a means to inform other service members of the same opportunities. The opportunities could be enablers which could provide support for service members to attain their post-secondary degree. Informing the higher education community of what was available for service members was a crucial element in bridging the gap of uncertainty (Lighthall, 2012). The outcomes of this study provided information that would be beneficial to service members and higher education communities.

Limitations

The limitations of this study were as follows:

1. Data collected were limited to service members who were separated from the military and not serving in an active or reserve status in the U.S. Armed Forces. Service members with the potential of being called to duty with the U.S. Armed Forces were not granted permission to participate in this study.

2. Data collected were limited to service members who did not retire from the U.S. Armed Forces. Service members who retired from the U.S. Armed Forces were not granted permission to participate in this study.

3. Data collected were limited to a four-year institution of higher education in the coastal southeast Virginia area and to a two-year institution of higher education in central Virginia. There were no data collected from any other institution of higher education.

4. Data collection were limited to the 2017 fall semester at both institutions. No data were collected during any other semester (or quarter).

5. Data were collected only from service members seeking two-year, four-year, or graduate degrees. Research was not restricted by the degree that students were seeking.

Assumptions

This study was based on the following assumptions:

1. The institutions of higher education where the military service member was admitted were either two-year or four-year and provided associates, bachelors, or graduate degrees.

2. Military service members could distinguish between earning a certificate, a degree, or a credential upon being admitted into an institution of higher education. A degree-seeking student was enrolled with the purpose of earning an associates, bachelors, or graduate degree upon completion of the course requirements. A service member enrolled in college may have already earned a degree but could have been required to attend an institution of higher education to acquire a credential such as a specified certificate for career enhancement.

3. Military service members had the option to use their government benefits to earn a post-secondary degree.

4. The institutions of higher education and veteran education support networks were interested in obtaining the findings of this research.

Research Procedures

Service members enrolled at either a four-year institution of higher education in the coastal southeast Virginia area or a two-year institution of higher education in central Virginia were the identified subjects for this research. A survey was created to gain information

pertaining to service member motivating and enabling factors for seeking a post-secondary degree. The instrument was validated by military service members of similar demographics of those who would potentially participate in the study. The researcher contacted the directors of the military-affiliated student assistance office employed at the institutions of higher education where the data was to be collected. The directors were provided an overview of the study and later provided the survey to send by email to the service members within their institutions. The research took place during the fall of 2017 using Likert-typed questions and Qualtrics software to gather information on the motivating and enabling factors of military service members pursuing a college degree. Follow-up emails were sent to enable all eligible service members to participate. The amassed data were used to answer the research questions and to provide findings for this study.

Definitions

The following list of terms and their definitions aided the reader in understanding this study:

Active duty – Armed forces service members whose primary profession was the military and their duty status was full-time; this included reserve and National Guard service members from any of the service branches who were called to full-time status (Lane, Hourani, Bray, & Williams, 2012).

Career field – The specific occupation which a service member trained for and performed as their specific primary occupation within the military (U.S. Department of Labor, 2014).

Distance education – A method by which instruction was presented or provided to students in a location other than that of an established classroom and/or physically separated from the facilitator or instructor (Naidu, 2014).

Enabler – Attitudes, behaviors, and factors that provided the opportunities for students to become associated with the academic environment and to advance intellectually from the instruction (DiPerna, 2004).

Installation – A contained area designated by the U.S. government for DoD armed services use; these were referred to as bases, posts, stations, and other identifiable names (e.g., Fort Lee, Langley Air Force Base, Naval Station Norfolk) for that specific location (Vance, Polson, & Persyn, 2014).

Motivator – Enhancements and experiences that supported a student's awareness, knowledge, continuous improvement, and perseverance in a consolidated effort that promoted educational success and well-being (Preston & Claypool, 2013).

Rank – Specified authority and command and control of a military organization by identifying a service member's level of responsibility within its formal structure (Ju & Lee, 2017).

Reserve duty - Armed forces service members whose primary profession was not the military and their duty status was part-time; this included reserve and National Guard service members from any of the service branches who awaited to be potentially called to full-time status (Sanchez, Bray, Vincus, & Bann, 2004)

Service member – A person in the military who was currently serving in a branch of the U.S. Armed Forces (Furtek, 2012).

Tuition Assistance – A financial assistance program used to support service members' pursuit of voluntary off-duty education programs which enhanced personal and professional growth and self-development (U.S. Department of the Army, 2013).

Veterans Affairs Benefits – Financial support that was used to offset educational cost for eligible service members, veterans, and spouses either pursuing an education program or vocational training (U.S. Department of Veteran Affairs, 2017).

Overview of Chapters

Motivating and enabling factors that had influence on people attaining a degree were identified in Chapter I. Statistical data pertaining to salaries of those individuals that had attained a post-secondary degree as opposed to those without a degree were discussed and showed that earnings and employment opportunities increase for individuals with a bachelor's degree or higher (Calderon & Sorenson, 2014). The chapter, also, highlighted that education and training were critical to the success of military personnel (Persyn & Polson, 2012) and illustrated some of the encounters that service members endured while trying to attempt to initiate and proceed with the process of obtaining a degree (Klaycamp, 2010). To assist service members in attaining a degree, the Servicemen's Readjustment Act of 1944, generally referenced as the GI Bill, (Kasworm, 2003) and other DoD programs enabled the process (Federal Register, 2014). Further research revealed the importance of service members attaining post-secondary degrees; it, also, showed how providing degree-seeking information was significant for the institutions of higher education in developing an understanding of the particular issues that service members endured (Federal Register, 2014).

Chapter II reviewed the literature relating to the motivational influences for service members which included their promotion potential, achievement and goals, aspirations, and salary increases. Next, the review included enablers that enhanced the military service members' capabilities which included financing, school options, and positive command support.

Chapter III described the procedures and techniques used to amass and perform data analysis. This chapter defined the population, research variables, methods of data collection, statistical analysis, and provided a summary.

Chapter IV reported the findings of the study and research. The findings were based upon the researcher's analysis of the population and data collected. A summary was included.

Chapter V was the conclusion of the study. It summarized the study, provided answers to the research questions, and made recommendations for implementation of the findings and topics for further research.

CHAPTER II

REVIEW OF LITERATURE

This review of literature presented the motivating factors supported by enablers as critical influences on the decisions of service members to increase their education levels. The literature supported the importance of service members attending institutions of higher education to attain post-secondary degrees. A post-secondary degree included an associate's, a bachelor's, a master's, or a doctoral degree earned from a college or university after one completed secondary education (Hofmann, Faller, Limacher, Méan, Tritschler, Rodondi, & Aujesky, 2016). For the purposes of this study, the emphasis was placed on bachelor's degree attainment.

There were three areas that emphasized the importance of service members earning post-secondary degrees: (1) Education Variances provided information pertaining to the educational level differences among service members, (2) The Need for Post-Secondary Education explained what knowledge service members gained once earning a post-secondary degree, and (3) Recent Evolution of Military Education detailed how the transformation of military education had occurred. Both, motivating and enabling factors, had manipulative effects on service members and their decisions in pursuing their post-secondary degrees. To focus on those entities that supported service members attain their degrees, the researcher conducted a bilateral method in reporting findings from literature where: (1) Service Member Motivating Factors highlighted the various motivating factors that could have been present in service members seeking post-secondary degrees and (2) Service Member Enabling Factors described certain entities that were available to assist service members in earning their post-secondary degrees.

Service members had various reasons for wanting to complete their post-secondary degrees (Non-Traditional Education Support (DANTES), 2015). Firm objectives, such as

specific degrees or skills needed to acquire career goals were critical motivating factors for service members as they sought post-secondary degrees. When selecting fields of study, service members often considered the advantages of seeking additional education which included enabling their military career advancement or aiding with them gaining civilian employment after military service (DANTES, 2015).

The military was supportive of service members furthering their education and encouraged them to obtain post-secondary degrees especially those with a specific skill (Wooten, 2015). There were often opportunities available for service members that sought post-secondary degrees which assisted them with their education process. Those opportunities could have been enablers which often facilitated an ease of transition for service members attempting to enter an institution of higher education to earn a post-secondary degree (Boyle & Abdullah, 2015).

The literature supported the purpose of this study which was to research the motivating factors and the enabling factors that supported service members earn a post-secondary degree. The findings from this study were used to educate the administrators, faculty, and staffs of institutions of higher education on the motivations of service members regarding their decisions to seek post-secondary degrees and the enablers that supported their efforts.

Educational Variances

Educational levels of service members within the DoD service components varied among the enlisted, warrant officer, and officer ranks (Brown, 2015). Although the titles of military rank may have varied, the pay grade alignment was consistent across the four DoD service components (Army, Air Force, Navy, Marines); the exception was the Air Force which did not have warrant officer ranks and pay grades (U.S. Department of Defense, 2016).

Historically, an enlisted service member was one who joined the military during or straight after graduating from high school or one who allowed post-graduation time to elapse prior to joining (Mankowski, Tower, Brandt, & Mattocks, 2015). Data obtained from the U.S. Department of Defense, Office of the Under Secretary for Personnel and Readiness (2011) indicated that of the 153,314 personnel who enlisted into the military during FY 11, 98% were high school graduates. Service members who enlisted in the military immediately after high school graduation may had been given the opportunity to earn credits toward a degree, but many may not had earned a post-secondary degree. Furthermore, many service members had already meet college entrance requirements (Barr, 2016). As well, service members who waited several years after high school to enlist, may have had the opportunity to take college courses and earn credits which would had enabled them to be closer to earning a post-secondary degree once entering the military (Teachman, 2007).

In order for an enlisted service member to become a warrant officer, there were required technical proficiencies and qualifications pertaining to that service member's specialty that first must had been attained (Boudreau & Winkler, 2011). The proficiencies of being a warrant officer must had been demonstrated through basic knowledge of the subject area and through a series of tests that must had been passed. Once selected for warrant officer, the service member attended a warrant officers' basic course for further development (Hammond & Lee, 2005). Given their length of time in the military, warrant officers may had earned a post-secondary degree. However, it was not required that a service member had to have a post-secondary degree to become a warrant officer (Boudreau & Winkler, 2011).

Officers attained their commissions into the military either by graduating from a service component academy, by completing a senior Reserve Officers Training Corps (ROTC) program

from a four-year college or university, or by attending the Officers Candidate School (OCS) as an enlisted service member or warrant officer (Allen, Byrum, Oliver, Russell, Young, & Babin, 2014). A service member must had either attained a post-secondary degree prior to receiving his or her commission as an officer or had made provisions to earn the degree (McGee, 2009). Because of the various complexities associated with being an officer, which involved critical thinking skills and the ability to manage large amounts of resources, a bachelor's degree was required (U.S. Army, 2015). Thomason (2013) stated that officers possessed a distinct advantage over enlisted service members because of military policy requiring them to have had a post-secondary degree when entering the service.

This study pertained to service members' motivations in earning post-secondary degrees and the enablers that supported them. The emphasis of this research focused on service members a post-secondary degree.

The Need for Post-Secondary Degrees

Service members enrolled in higher education had significant characteristics such as persistence, collaborative skills, and self-discipline, which were continuously developed as part of their military training and education (Vacchi, 2012). When deciding whether to seek post-secondary degrees, service members relied on those characteristics as well as critical personal instincts which assisted them in making the decisions to attend an institution of higher education.

The military evolved into an organization that required its personnel to leverage their critical thinking and problem-solving skills, as opposed to them using repetitive memorization techniques (Brown, 2015). As a result, the military recognized that education was the medium through which service members attained knowledge and skill (French, 2014). A unique organization, the armed forces emphasized continuous professional education as a critical entity

of success for its organizations (Gleiman & Zacharakis, 2016). Service members were evaluated based on how well they implemented their education in enabling them to complete critical thinking tasks (French, 2014). Post-secondary education enabled service members to attain necessary critical thinking skills. Cornell-d'Echert (2012) placed emphasis on education becoming a way of life and as such stated there should be no end to education. Increasing critical thinking skills had been a goal of higher education for numerous years (Ahrari, Samah, Hassan, Wahat, & Zaremohzzabieh, 2016). For service members to have had the ability to increase their critical thinking and problem solving skills, pursuing and attaining a post-secondary degree provided them the possibilities of doing so.

Recent Evolution of Military Education

The military transformed in 1973 from a system where the majority of its service members were drafted to where it became an all-volunteer force (Bailey, 2007). As this transition occurred, the military evolved from its previous identity of being a lower working class service organization to one viewed as being highly educated and professional (Bailey, 2007). To recruit and retain the required quality personnel, the military began investing in the talents of its service members and began offering educational and quality-of-life benefits (Cohen, Warner, & Segal, 1995). Unlike civilian organizations, the military could not recruit senior leaders from outside sources (Cooke & Quester, 1992). The military's leaders, in a continuous revolving cycle, were grown and developed from within its ranks (Gillespie, 2001). As service members progressed and attained higher ranks, the military methodically educated and trained them for progression (Peterson, 2012). Anticipating the requirement for a more educated military, many institutions of higher education had begun making valuable contributions to the

military's educational process by partnering with them and offering adult course selections (Zacharakis & Van Der Werff, 2012).

The military was committed to lifelong education for its service members (Schwartzman, 2003). Information obtained from the U.S. Army Combined Arms Command (USACAC) indicated that Army officials identified that its current education system was inadequate to fulfill the demanding needs of the increasing complexities of its mission (U.S. Army Combined Arms Command, 2015). Service members required an education system capable of developing adaptive and innovative individuals who could integrate and be a part of cohesive teams (U.S. Army Combined Arms Command, 2015). With the Army's current education system being insufficient of meeting educational requirements, this service branch made a 2015 announcement that it was establishing the Army University (Brown, 2015). This initiative had the means of increasing education within the Army and possibly producing high-quality and creative thinking individuals who would be capable of leading in complex and uncertain environments.

The Army University initiative revolutionized military education (U.S. Army Combined Arms Command, 2015). The Army University was designed to model the academic and institutional structure of several public universities across the United States (Brown, 2015). As the Army University was established, the Army planned to (1) develop new processes that would involve student and faculty collaboration with civilian universities, (2) implement an integrated shared transcript system that linked together all Army schools and stand-alone courses, (c) initiate faculty development and training courses for its instructors, and (4) establish an Army-wide common core curriculum that would facilitate the needed academic rigor and internal integration (U.S. Army Combined Arms Command, 2015, pp 11-12). The Army University was a single connection for all of the Army's educational systems and provided the opportunity for

Soldiers and Army Civilians to achieve their individual academic goals. This initiative transformed the Army into a more educated and professional service component capable of providing innovative solutions to complex problems which was critical as the Army increased its integration opportunities with major colleges and universities in the United States (U.S. Army Combined Arms Command 2015; Brown, 2015).

The military was dedicated to providing continuous education for its service members. This was demonstrated in the manner which the military embodied adult education as a process that facilitated individual growth, maturity, and learning for the good of achieving the collective goals of the entire organization. The military embraced the belief that human capital was their most valuable asset and they continuously invested in personnel education which enabled them to constantly progress as an organization (Zacharakis & Van Der Werff, 2012).

The literature review was conducted in a manner that enabled the researcher to follow a planned structure highlighting the motivating and enabling factors. This systematic approach enabled the research questions to be answered in a manner which visually illustrated all of the motivating and enabling factors. The structural manner of the literature review was shown in Figure 1. See Figure 1.
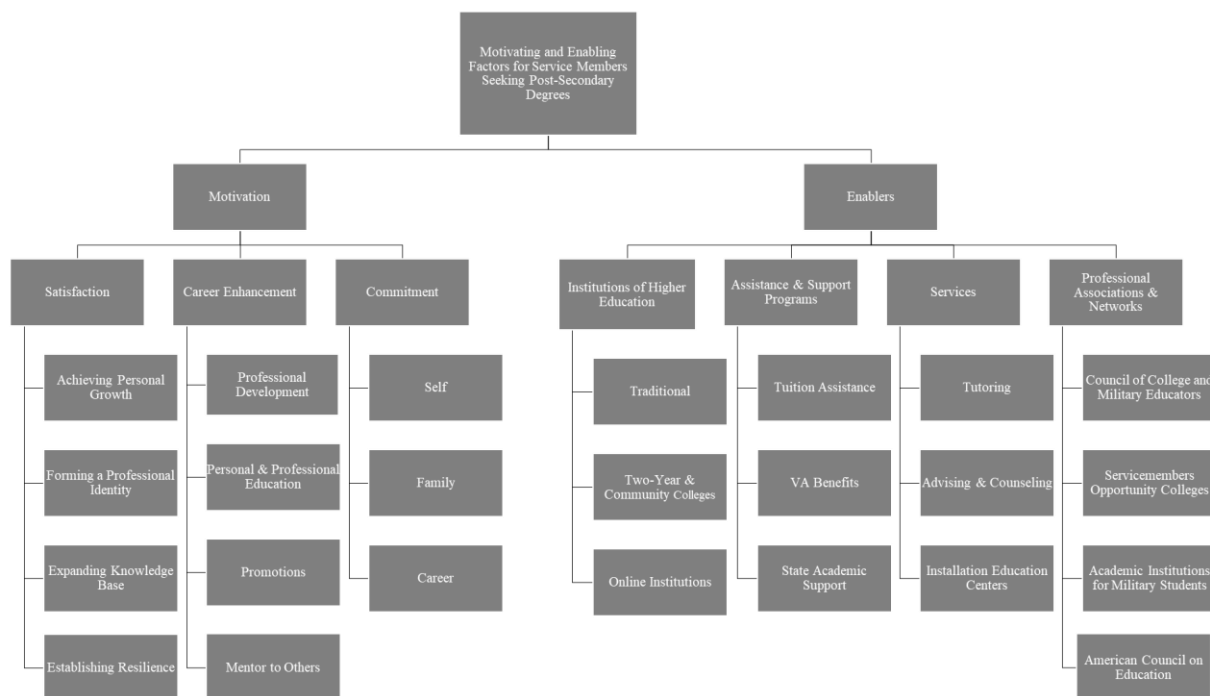
Figure 1. *Structural Diagram of Motivating and Enabling Factors*

Service Member Motivating Factors

Motivation was quoted as the desire or the reason for an individual to accomplish something (Charles & Senter, 1995). Lim and Kim (2003) suggested that learners were motivated when it was possible for them to improve or when it was probable for them to receive a reward for their efforts. Extrinsic and intrinsic were the two major types of motivation that pertained to individuals and their actions. Extrinsic motivation occurred when an individual performed an action to (1) earn a reward for competition or performance, (2) receive an evaluation by others for his or her performance, or (3) avoid adverse action. Intrinsic motivation occurred when an individual performed an action because it was personally rewarding or because it consisted of a personal challenge, which involved curiosity of a task or mastery of an event (Lim & Kim, 2003). Domene, Socholotiuk, and Woitowicz (2011) stated that academic motivation was not an "unidimensional construct" (p. 104), and career outcome expectations

may have had varied based on the multiple aspects in the manner which academics correlated with motivation. The inspiration behind an individual's motivations was based on his or her aspirations, desires, and personal satisfactions, this could had either been extrinsic, intrinsic, or a combination of both.

Dattilo, Ewert, and Datillo (2012) used a multimethod design which included Boshier's Education Participation Scale (EPS A-Form) as a method of determining motivational orientations in adult educational settings. The EPS-A Form (Boshier, 1991) contained 42 items which focused on seven adult motivational factors being (1) communication improvement, (2) social contact, (3) educational preparation, (4) professional advancement, (5) family togetherness, (6) social stimulation, and (7) cognitive interest (Datillo, Ewert, & Datillo, 2012, p. 5). Multivariate analysis of variance (MANOVA) procedures were used as a quantitative method to analyze data; subsequent to the quantitative data analysis, transcripts were reexamined using a constant comparison method to code and to identify major themes and categories. Dattilo, Ewert, and Datillo (2012) attained results that indicated that adults preferred social and cognitive motives and not those motives toward professional and educational orientations; also, they identified social contact, cognitive interest, and social stimulation as the three important motivations in their study.

Satisfaction

Research on the concept of satisfaction revealed that there were various definitions and outcomes. Satisfaction was a multidimensional term based on a psychological foundation whose concept pertained to what one hoped to achieve as a result of providing a service or product (Pizan & Ellis, 1999). Personal satisfaction could have been derived as a result of attaining a level of education, which an individual previously thought could not have been possible. As

post-secondary students, service members' satisfaction could have been essential in building their confidence which may have positively influenced them to attain knowledge, develop mental alertness, and acquire multiple new skills (Letcher & Neves, 2010). Highly satisfied service members who were attaining a post-secondary degree were more likely to continue in their degree programs as opposed to giving up and dropping out of school (Pizan & Ellis, 1999).

Snyder's Hope Theory (2002) stated hope was the distinguishable pathway that enabled individuals to achieve their goals; hope motivated them to continue achieving success. The rationale of having hope consisted of three core constructs being (1) goals which entailed the mentality that directed human behavior, (2) pathways being the routes an individual took to reach his or her goals, and (3) an agency which enabled the perception of the individual to achieve their goals through pathways (Rand & Cheavens, 2009). To achieve goals, service members often sought assistance and guidance from their families, peers, superiors, or spiritual leaders. These important advocates in the lives of service members often provided the most support throughout their military careers; in addition, these were the people most likely the individual service member depended on or trusted the most (Rand & Cheavens, 2009).

Professional satisfaction involved a gratification or a positive feeling gained from what one would receive evaluating his or her personal or professional life (Yildirim, 2015). Professional satisfaction was a behavioral variable that indicated how one felt about his or her profession (Spector, 1996). The pleasure or satisfaction one felt about his or her profession was the criterion for which personal satisfaction was measured (Başaran, 2000).

Yildirim (2015) stated that environmental and individual factors influenced professional satisfaction. Environmental factors were those depicted as external professional satisfaction; individual factors were depicted as those characteristics and life-long experiences one may have

gained such as the quality of a profession, education status, or socio-cultural condition (Yildirim, 2015). Personal promotion and developmental opportunities, earning potential, individual status, and professional relationships could have been identified as environmental factors (Başaran, 2000).

Achieving Personal Growth. The intent of many institutions of higher education was to not only assist students with their academic achievement, but to holistically develop them into college students. Arendale and Hane (2014) stated in previous years, colleges and universities assigned all institutional tasks pertaining to student academic achievement to the office of academic affairs and everything regarding student development was assigned to the office of student affairs. Those practices had since been integrated to where both the academic and student affairs offices were collectively charged with holistic student development. The holistic development of a student, also, pertained to service members seeking post-secondary degrees at institutions of higher education. The college experience process could have led to the professional growth of a service member.

Arendale and Hane (2014) performed qualitative research on the observed and perceived shifts in academic and personal attitudes and on the behaviors of students participating in the Peer Assisted Learning (PAL) program at the University of Minnesota. The PAL model, which was based on the those best practices from national peer learning models such as Supplemental Instruction, Peer-led Team Learning, and Emerging Scholars Programs, provided weekly academic assistance to students as a means that supported them achieving higher grades and improving their persistence rates. The research, also, focused on how the PAL program helped students grow seamlessly in academic knowledge of personal skills. The findings identified four themes that represented attitude and behavior. As a result of enrolling into the PAL, students

were shown to have (1) increased confidence levels and interpersonal skills, (2) reduced frustration and fear, (3) an ability to solve problems through cognitive and metacognitive thinking, and (4) the ability to assist other students (Arendale & Hane, 2014). These results could have represented what service members expected to gain as they sought to earn post-secondary degrees.

It was important for a student to transform from one who had only received knowledge to one who had matured to an individual who considered different viewpoints and challenged his or her personal beliefs, expectations, and morals (Riggs & Hellyer-Riggs, 2009). Students were emotionally and intellectually committed to certain beliefs and descriptions which affected their abilities to learn. When students were brought into the learning environment, their transformation occurred which incorporated their life and individual circumstances. This process was considered personal growth which was a prerequisite for social transformation. Service members who had personal goals to transform and to attain personal growth could accomplish this through their involvement in the learning process. The classrooms at institutions of higher education could have served the purpose of being the environments where service members' transformations could have occurred which facilitated their personal growth process (Riggs & Hellyer-Riggs, 2009).

As personal growth occurred for service members, they were becoming familiar with the various cultures of their fellow service members. This process enabled them to collaborate better with their counterparts which enhanced unit cohesiveness and reiterated the concept of teamwork within organizations (Riggs & Hellyer-Riggs, 2009).

Forming a Professional Identity. Professional identity referred to the unconfined relationship between one's personal and professional personas (Wilson, Liddell, Hirschy, &

Pasquesi, 2016). Bragg (1976) defined professional identity as internalizing the aspects of one's

profession into the self-image of him or her and acquiring the competence, judgement, and skill

necessary for his or her commitment to the profession. An individual who had received a post-

secondary degree was often recognized by society and by his or her subordinates, peers, and

superiors as being a professional. Given there were various descriptions regarding the identity of

a professional, there was an overall concurrence that a professional possessed external and

internal components which were critical in forming the distinguishing characteristics of his or

her individuality (Murray, 2013). The external components included regulated standards, social

norms and expectations required of a distinguished and educated individual. As well, internal

components related to an individual's attitude and the self-concept and awareness of the

professional characteristics which the individual correlated to the position associated with being

a professional. When external and internal components coincided, this allowed others to identify

an individual as a professional. This enabled the integration of an individual's personal skills

into their organizational tasks and empowered him or her to become active in the community and

in professional networks. An individual's self-conceptualization allowed him or her to have had

the confidence to have made significant professional decisions which, also, enabled them to gain

additional experience. This allowed the individual to continue to develop as a professional

(Murdock, Stipanovic, & Lucas, 2013).

Expanding Knowledge Base. Simpson (1997) stated that while there was a need for

individuals to attain necessary information to live from day to day, there also existed the need for

them to acquire information to expand their knowledge which facilitated increased work

proficiency. Individuals may have had the desire to learn more for personal reasons. Learning

could have been for (1) developing cultural enjoyment, (2) assisting more within the community,

(3) increasing association with friends and family, or (4) cultivating personal activity. Individuals may have sought the opportunity to expand their knowledge base in order to make better use of their time, to bind themselves with other people of like interest, or to make changes in their lives. Expanding one's knowledge served as a confidence builder for many individuals and may have motivated them to try additional challenges that they never would have attempted (Simpson, 1997).

The knowledge of how to personally attend to matters was, also, known as environmental learning (Robelia, Greenhow, & Burton, 2011). As individuals expanded their knowledge base, they were more apt to develop understandings of complex issues from a broader and deeper perspective. This allowed individuals to dialog and engage in problem-solving as part of a group or a member of an organization formed with the sole purpose of providing in-depth analysis and diagnosis of issues. Kohl (2010) stated several factors pertaining to adults returning to the classroom to expand their knowledge base. The factors included (1) the requirement to increase knowledge in order to be competitive in a knowledge-based economy, (2) changes in personal identity such as that of an immigration status or growing close to retirement age, (3) advances in technology that provided the student the flexibility to learn at a location convenient to himself or herself and (4) finding placement into a more advanced international higher education system (Kohl, 2010, pp. 10-18).

Establishing Resilience. Taormina (2015) alluded to resilience having Latin origins meaning to rebound or having flexibility. A person displayed resilience when he or she was able to endure or to recover from difficult situations; thus, personal resilience pertained to an individual's ability to persist and recover from the complications encountered (Taormina, 2015).

Durmont and Provost (1999) stated that resilience could include environmental influences that were externally provided to an individual such as the social support he or she received.

Krasny, Lundholm, and Plummer's (2010) discussion on social-ecological resilience systems pertained to an area of vast growth where attaining international scholarship, understanding the mediation of society and ecosystems, and learning from global changes prevailed. The assembly of these concepts broadened the relationship between resilience, learning, and environmental education; thus, a catalyst that embodied a change in the role in education efficacy had formed. Incorporated with the works from Walker and Salt (2006), several viewpoints had emerged about how environmental education could contribute to changes and how resilience was incorporated into the adaptive and learning process (Krasny, Lundholm, & Plummer, 2010). As such, resilience could be viewed as the process that built adaptive capacity within individuals which contributed socially to how learning occurred and education was attained (Krasny, Lundholm, & Plummer, 2010).

Smith and Hollinger-Smith (2015) related resilience to opportunities to learn new skills, reassess areas of interest, or other time-fulfilling practices as one encountered the challenges in life. Positive feelings toward achieving new accomplishments could have often led one to a greater level of resilience which led to successfully overcoming difficulties (Wild, Wiles, & Allen, 2013). When some individuals experienced positive occurrences, they may have encountered more of an intense effect which could have allowed for longer enjoyment; however, this may not had applied to all persons whose positive emotions may not have been evident (Smith & Hollinger-Smith, 2015).

Career Enhancement

In an effort to meet the changing needs in many of the growing occupational specialties across the country, many civilian organizations had incorporated employee training and education programs consistent with theses changing needs and provided career enhancement opportunities for their employees (Alexander & Goldberg, 2011). The military was no different in their concept of educating their force as a means of remaining abreast of their changing requirements and enhancing the careers of service members. Education and training could have improved one's learning; this could have been facilitated through three strategies consisting of "(1) training and education programs which enabled job flexibility, (2) knowledge and skill development for personal and professional growth, and (3) multiple area and subject focuses as a means of developing a more well-rounded employee" (Alexander & Goldberg, 2011, p.6). Lowin (2003) stated that education and training were mechanisms for creating quality within personnel; the outcome derived from this would be persons with (1) conceptual and strategic thinking ability, (2) self-confidence, (3) initiative, (4) entrepreneurial achievement, and (5) teamwork capabilities.

Working adults were driven by multiple motivational factors to continue their studies at institutions of higher education (Lee & Pang, 2014). There were five motivational factors studied (1) personal development, (2) career advancement, (3) social pressure, (4) social and communication improvement, and (5) escapism; career advancement was the most significant motivational factor revealed. Advances in global development substantiated that higher education for adults was critical for increasing competencies and skills which were needed to propel economic growth. Lee and Pang (2014) found that working adults were aware of the

significance of how continuing their education and obtaining post-secondary degrees were important for their career advancements.

Professional Development. Evans (2014) defined professional development as a transitional process which an individual's professionalism may have been enhanced with permanent knowledge which consisted of work practice comprised of an occupation or a profession. Within the military, professional development programs were either workshops or written assignments created especially for service members. These programs were designed to enable service members to keep current with evolving ideas and to remain abreast of emerging concepts or new directives within their career fields. To meet the demand for ongoing professional development programs, many military organizations had instituted certificate or professional degree programs to enable educational development of their service members (Evans, 2014).

The Army had implemented the Institute for Noncommissioned Officer Professional Development (INCOPD) which was a program designed to provide direction and oversight of the Noncommissioned Officer Education System (Training and Doctrine Command, 2015).   The INCOPD provided an organizational structure focused on the noncommissioned officer service member educational development. This initiative was designed to improve the individual's knowledge in emerging sciences and technology-based applications. The INCOPD also provided the Army the means to meet service members' learning needs with additional educational resources which supported their education (Training and Doctrine Command, 2015). As this professional development model supported the individual service member's lifelong learning requirements, it could have been a motivational factor that enabled the service member to seek a post-secondary degree.

Personal and Professional Education. The importance of lifelong learning and education for adults in the U.S. was becoming important. Employers in the job market were concerned about finding personnel who not only had the technical skills to operate sophisticated computers or interpret complicated diagrams, but who demonstrated higher order thinking and were proficient in those skills usually gained by attending institutions of higher education (Alexander & Goldberg, 2011). The typical employee needed more than job training; however, higher education was critical to ensuring they gained the skills necessary to be competitive in the future employment market. In many instances, industries had partnered with institutions of higher education in their regions to establish degree programs that provided the career-enhancing skills for those adults that needed post-secondary degrees in order to advance in their professions (Alexander & Goldberg, 2011).

Sloat (2011) stated that education and career enhancement in the military were two separate entities that could be incorporated into one common experience. Education was highly encouraged in the military, and without it a service member could have found it difficult to advance in his or her career. Within the U.S. Air Force, Professional Military Education (PME) courses had been established as tools for advancement which allowed service members to progress in their careers. These courses incorporated skills, knowledge, and leadership and offered transferrable post-secondary degree credit. Whether a service member enrolled in civilian or military-based post-secondary courses, it was critical that service members continued their education as an effort to enhance their careers (Sloat, 2011).

Promotions. Promotion in the workforce was an important organizational procedure in careers of individuals as they managed their professions and negotiated the requirements necessary for increased responsibility and upward mobilization (Kaplan & Ferris, 2001).

Promotion was usually considered as one of the entities of personnel management; the unique

characteristics and differences in the promotion process varied as it was compared across

multiple organizations (Garcia-Izquierdo, Moscoso, & Ramos-Villagrasa, 2012). Within

organizations, typically there was a degree of knowledge within the workforce of the internal

influences that impacted promotion (e.g., available positions, financial stability, projected

revenue); individuals may have had a general understanding of the external influences that

impacted promotion (e.g., national economy, unemployment rate, available workforce) (Garcia-

Izquierdo, Moscoso, & Ramos-Villagrasa, 2012). Generally, employees were familiar with

promotion criteria and what was expected of them to advance to the next higher level. In some

instances, having either earned a post-secondary degree or being in the progress may have

offered an advantage for an individual pursuing promotion.

The Department of the Army prescribed the promotions and reductions of service

members in the military personnel system (U.S. Department of the Army, 2008b)).

Specifications for promotion were provided and was stated that service members were authorized

to earn points toward promotion if they attained civilian education conducted at a U.S.

Department of Education nationally or regionally recognized accredited institution. These

institutions were those listed in the American Council on Education (ACE) published Accredited

Institutions of Postsecondary Education Guide and could be obtained from the U.S. Department

of Education (U.S. Department of the Army, 2008b, p. 51). Additional guidance specified that

enlisted service members could earn points towards promotion based on their most current

transcript which the institution's name and address must have been included. The number of

promotion points an enlisted service member earned was based upon the total number of credits

he or she received while seeking a post-secondary degree (U.S. Department of the Army, 2008b, p. 51).

  Mentor to Others. Mentoring was stated as establishing a developmental relationship with a more experienced individual where he or she could serve as a guide, role model, instructor, or supporter for a less experienced or junior person (Eby, 1997; Johnson & Ridley, 2008). Kram (1985b) stated that a mentoring relationship was generally defined as one where a higher-ranking or more experienced individual with advanced knowledge was committed to providing support to the career of a less-experienced person (mentee). In the military and in corporate industry, a mentor could have been a person from the same organization or a person who had experience in the same military occupational specialty or the same corporate career field. A mentor typically found himself or herself taking interest in the career progression or development of a mentee and administered crucial fundamental lessons such as counsel, encouragement, and guidance. A mentoring relationship could have been initially formal and then proceeded as part of a workplace program or may have been maintained as an informal work relationship (Yang, Xu, Allen, Shi, Zhang, & Lou, 2011). In many instances, the mentor/mentee relationship could have endured for the span of an entire career which could have led to permanent friendships being established (Eby, 1997; Johnson & Ridley, 2008).

  Thomas and Thomas (2015) stated that the interactions between a mentor and mentee were at a personal level; however, the relationship did not have to be one of a senior-junior person relationship. Mentoring could have occurred between peers and in some cases in the military, it may had occurred where the mentor was junior in rank to the mentee; this may have been the case where a senior noncommissioned officer provided guidance to a junior officer. Situations may have arisen where an officer, whom may have been a recent college graduate,

sought guidance from the noncommissioned officer whom may have had knowledge and experience based on the number of years in the military (Thomas & Thomas, 2015). Mentoring could be crucial for both the newer and older members of an organization. Providing education for people established the attitudes and interpersonal skills that supported developmental relationships and the mentoring process (Kram, 1985a).

Commitment

Commitment was stated as being related to having goal-directed behavior and having the determination to exert effort in attaining that goal (Den Hartog & Belschak, 2007). This behavior, commitment, could be referred to as being emotionally attached to a target (Perreira & Berta, 2016). A commitment indicated a sense of obligation and focus (Brown, 1996); this was having an understanding of the necessities to attain the goal and having the willingness to apply the effort to achieve the requirement (Chiocchio & Lafreniére, 2009). Being committed at a higher level may have motivated individuals to achieve greater accomplishments, sacrifice their own personal well-being for something of higher magnitude, or connect with something they could have identified (Solinger, van Olffen, & Roe, 2008).

Commitment to achievement was an important contributing factor of individuals attempting to reach their goals and their performance in pursuing their goals (Meyer & Herscovitch, 2001). Hamidi, Mohammadibakhsh, Soltanian, and Behzadifar (2017) stated that commitment was a general analysis of the organization which was related to an individual's length of stay within that organization and to the degree which he or she participated in its activities; this coincided with the individual's sense of belonging to the organization. Persons that were highly committed to an organization or to anything else that was personally important to them placed great value in the effort and work which they exuded a feeling of obligation

toward goal completion. Well-being and emotional intelligence served as factors that impacted the levels of commitment displayed by individuals (Hamidi, et al., 2017).

Commitment to Self. The commitment generated by individuals may have had the tendency to overlap between what they displayed towards their employment and how they were personally committed to family matters. It was not uncommon for a person to have a long-term emotional attachment to a work project which may have generated a unique relationship with that particular initiative (Den Hartog & Belschak, 2007); this type commitment may have been prevalent in a service member's desire to attain a post-secondary degree.

Novacek and Lazarus (1990) revealed that closely linked to motivation was understanding the interests of different people and knowing what matters and values they had a strong commitment towards. Farley (1986) stated that personal commitment was an enduring motivational quality; this coincided with the individuals' attention and drive that were invested into what they were attempting to accomplish (Brickman, 1987). When individuals were committed to personal achievement, they were willing to put forth the effort which made attaining their goals extremely significant (Novacek & Lazarus, 1990). Attaining a post-secondary degree may have been classified as a self-committed goal of achievement for service members.

Commitment to Family. Family members should have had the opportunity to observe multiple examples of commitment from their families and provided reflection based on their commitment-related stories of what they observed within them (Weigel, Bennett, & Ballard-Reisch, 2003). It was possible that the effects of family commitment would have varied based on how their stories differed in accordance with the variances within their home settings.

The fact that a parent took the effort to attain a post-secondary degree could have been identified as an encouraging factor within the family. Kumar (2016) stated that the positive impact of family involvement was widely recognized as a positive influence for children. Home-inspired education was considered an impactful component of home involvement (Bouffard & Weiss, 2008); this may have been a method to demonstrate family commitment within the home. Parents that exhibited an understanding of how education changed life dynamics provided their children with a renewed sense potential possibilities. Children of parents who were appreciative of educational opportunities had the increased potential for college scholarships, greater degrees of freedom, and the chances of being accepted at the more prominent institutions of higher education (Kumar, 2016).

Commitment to Career. Commitment to a career referred to the level of motivation demonstrated by an individual to the work in his or her profession, vocation, or career field (Carson & Bedeian, 1994; Kidd & Green, 2006). One's commitment could best be understood by analyzing (1) how much personal effort and energy a person had invested in his or her career, (2) the consequences of leaving the career, (3) how effective an individual was in conducting the work involved, (4) how a person was emotionally attached to the profession, and (5) how obligated he or she was toward the organization (Kidd & Green, 2006). There were noted links between how well one performed within his or her profession and how well he or she was committed to that career (Fu, 2011). Blau (1989) discovered that individuals who were highly committed to their careers were likely to devote time on developing skills and had the least intentions in leaving their profession. Fu (2011) found that career satisfaction was an important factor for many professionals and affirmed that individuals committed to their careers remained in place longer to develop the skills and relationships needed to enhance their professions.

Carson and Bedeian (1994) stated that an individuals' career identities were a reflection of their self-awareness and the emotional ties they had to the profession. The individuals' career identities were related to age, the number of years vested, and the amount of education attained (King, 1997).

<center>**Service Member Enabling Factors**</center>

Student enablers included factors such as contextual or environmental influences that had impact on the development of student skills (Christenson & Anderson (2002). Those factors allowed and assisted service members to participate in their own learning; these influences, considered enablers, contributed to them earning their degrees. Elliott, DiPerna, and Malecki (2002) stated that academic enablers could be personal attitudes and behaviors that facilitated academic instruction. The construct of academic enablers was related to a student's academic skill and his or her academic achievement. Ensuring service members were provided the necessary enablers would have been critical to them attaining a post-secondary degree.

The DoD had service programs that aided service members who were either starting or continuing their education (McGovern, 2012). These programs were considered enablers because their goals were to enhance the service members' educational experience (Kirchner, 2015). Military leaders and education professionals often performed periodic assessments on government-provided services to determine if they were operating proficiently and if service members were benefitting from them (Boston, Ice, Gibson, 2011). There were, also, reporting mechanisms in place to evaluate the quality of military programs and to make improvements where necessary. This ensured that those enablers remained intact and that they remained operationally proficient (U.S. Department of the Army, 2008a). It was the responsibility of military leaders, university officials, and education professionals to ensure that enablers were

periodically inspected for proper administration so that they remained available to benefit the service members (U.S. Department of the Army, 2004).

Institutions of Higher Education

Institutions of higher education are complex organizations mainly distinguished by their brand and their multi-product capability (Agasisti & Johnes, 2015). Institutions of higher education conduct teaching and research across the various subjects and at multiple levels; this hampers the ability to effectively evaluate and rank them since one may not have performed as well in several areas but outperformed their competing organizations in others.

The ability for evaluators to effectively assess institutions of higher education may have created more practical challenges than it did for other public entities (Guitérrez-Romero, Haubrich, & McLean, 2008). Teaching and learning were considered to be the primary purposes that colleges and universities existed (Ruhupatty & Maguad, 2015). Institutional support for activities and programs must have been aligned with planned budgets and expenditure models. In order for the administrators of institutions of higher education to have properly financed their educational programs, they must have prioritized all requirements as a means of ensuring adequate resources were available (Ruhupatty & Maguad, 2015). Collaboration between academia and industry enabled money earmarked for research to be used as a mechanism to fund various programs at institutions of higher education (Zhou, Tijssen, & Leydesdorff, 2016).

Abdul-Amin (2016) stated that when advising students to attend college, counselors must overcome the past misconceptions and myths of Historically Black Colleges and Universities (HBCUs) and place these institutions on the same level as they would had placed any other institution of higher education. In 2012, in spite of HBCUs representing 1.3 percent of the institutions of higher education in the U.S., they awarded 16.7 percent of the bachelor's degrees

and 17.8 percent of the science and engineering bachelor's degrees to Black students that year; however, there was a fair amount of diversity that was represented at HBCUs (Abdul-Amin, 2016). Ekman (2013) stated that contrary to what was believed pertaining to college campus populations, underrepresented students accounted for the same percentages of students entering at both private and public universities; the graduation for that population was significantly higher at private colleges than it was at public universities. While state institutions of higher education may have had a lower tuition cost than private institutions, in many instances, students resulted in paying a lower cost at the private college or university. Most private institutions raised more money in donations and earmarked the funds to be used for scholarships which in many cases, went to underrepresented students Ekman (2013).

Traditional. The traditional universities usually have two major focuses: teaching and research (Bikse, Lusena-Ezera, Rivza, & Volkova, 2016). Traditional universities have the significant challenge of creating favorable preconditions to aid in student success which enables their employment preparation. Providing proper education facilitates for instruction is important for critical thinking, decision making, and problem solving (Bikse, et al., 2016).

Service members represented a growing population on the traditional college campuses (Whiteman, Mroczek, Macdermaid-Wadsworth, & Barry, 2013). Service members arrived on campus with a wealth of knowledge, strengths, and experiences typically not observed in the traditional college student (McCaslin, Thiede, Vinatieri, Passi, Lyon, Armstrong, & Chitaphong, 2014). Contrary to having many (and sometimes more) of the typical characteristics of the traditional college student, in many instances, service members were categorized as being non-traditional students at their institutions of higher education. Non-traditional students were those typically underrepresented in the traditional higher education environment; they included older

students, married students, single parents, and minority groups (Crosling, Thomas, & Heagney, 2008).

Bonwell and Elson (1991) indicated that a way to determine the elements that facilitated a supportive traditional environment was to observe the specific behaviors that students rated most highly on their course critiques and evaluations; there were significant numbers that presented a fairly consistent pattern. The classroom behaviors that fell within two general categories greatly coincided with how effective students rated their instructors (Erdle, Murphy, & Rushton, 1985). The first of the behaviors revealed were those that displayed enthusiasm or rapport which had a positive impact on students' interest and participation; the main characteristic of that behavior was listed as charismatic which generally meant that the instructor spoke clearly, related the material to students' interest, and moved and gestured in a manner that maintained student attention (Erdle, Murphy, & Rushton, 1985, p. 395). The second category annotated was organizational skills; these actions included presenting preliminary overviews, stating course objectives, and using headings for the discussions (Erdle, Murray, & Rushton, 1985, p. 395). Bonwell and Elson (1991) stated that creating a supportive traditional environment required more than just having the skills that facilitated classroom participation and learning. Instructors must have generated an environment consisting of an intellectual and emotional climate that encouraged students to go beyond the norms by taking risks (Bonwell & Elson, 1991).

Two-year and Community Colleges. Two-year colleges provide a vital experience in higher education demonstrated by the extensive growth that have prevailed in the past few decades; honor programs have attributed to the extensive growth of some two-year colleges (Armstrong, 2015). Hammons and Orf (2016) identified there being 928 two-year colleges

within the U.S. Many two-year colleges are technically-based institutions and have manufacturing-based curriculums and programs (Chang & Wang, 2016). Many manufacturing programs at two-year institutions include technology; these are characterized as highly applied and closely resembled what was seen in industry (Elmaraghy & Elmaraghy, 1996). Manufacturing programs at two-year colleges include unique and abounding curriculum environments that provide an opportunity for increased interaction between students and faculty as opposed to the liberal arts type programs at four-year institutions (Chang & Wang, 2016). In order to provide the number of skilled workers needed for industry, two-year colleges are critical to the U.S. manufacturing industry (Carnevale, Smith, & Strohl, 2013). Many two-year colleges offer honors programs which vary in scope, size, and structure depending on demographics and the make-up of the institutions. The honors program at both Mt. San Jacinto College, Riverside County, California and Lane Community College, Eugene, Oregon have large populations of students, veterans, and economically disadvantaged community members; they have aspirations to graduate, transfer to a four-year institution, and later attend graduate school (Rosenow, Morrison-Graham, & Ozolins, 2016).

Community colleges provide a manner for students to attain general education courses at a fraction of the cost that would be paid at a four-year college. For over a decade, community colleges have overcome myths and stereotypes pertaining to their quality which many have now attained articulation agreements with four-year institutions of higher education (Patton, 2017). The partnerships which have been established between community colleges and four-year institutions eases the transfer burden of students looking to continue their education; in many instances, adjunct instructors may have been observed teaching at both institutions which adds to the student's level of confidence in his or her ability to transfer upon completion (Patton, 2017).

In addition to providing students with transfer education prerequisites and workforce education, community colleges provide multiple lessons in democracy (Kisker, Weintraub, & Newell, 2016). Civic engagement lessons at community colleges included community service learning, voter registration drives, classroom discussions on policy issues, and forums that discussed campus and student community issues (Kisker, 2016; Roman & Kisker, 2016). Many of the civic-focused activities conducted at community colleges were similar to those at four-year institutions but may have had the tendency to have been more impactful; indeed, many of the students were local area residents or had close relations with communities that had marginalized education and social economic systems (Cohen, Brawer, & Kisker, 2014).

Community colleges are critical in providing adult-centered education that enable pathways to credentials, diplomas, certificates, and employment training opportunities; also, they offer education to those wanting to fulfill their leisure time with the learning experience (Miller, Grover, Deggs, D'Marco, Katsinas, & Adair, 2016, p. 17)

Online Institutions. The education paradigm has advanced in the manner where the journey of lifelong learning is now enabled through the use of advancements in technology which allows increased learning in a reduced amount of time. The learners' satisfaction and persistence are considered to be critical success indicators for online universities where all of the teaching and learning are conducted online (Joo, Lim, & Kim, 2011). Online institutions have rapidly increased in higher education in the U.S.

A number of comparative studies found that between online and face-to face courses, online students performed as well as or better than face-to-face students (Russell, 1999; Tucker, 2001). Additional research found that student satisfaction did not significantly differ across the two instructional mediums (Allen, Bourhis, Burrell, & Mabry, 2002; York, 2008); this provided

further support that online classes could be an equally effective learning environment (Driscoll, Jicha, Hunt, Tichavsky, & Thompson, 2012).

Yoo and Huang (2013) found that online degree programs focused on the adult learner; however, they must incorporate workforce-related issues and career development opportunities in order to fully engage the online adult learner. With the number of institutions of higher education reaching out to adult learners by providing online degree and certificate programs, the growth of online education provided an increasing financial incentive for colleges and universities to offer programs online (Wilson, 2010). The online education trend was meeting the needs of working adults who have complex schedules and multiple obligations (Wilson, 2010). Compared to traditional college students, adult learners had unique characteristics and requirements; many adult learners had jobs and full-time family responsibilities (Hung, Chou, Chen, & Own, 2010). Providing online education allowed adult workers the opportunity to maintain their jobs and family responsibilities while continuing their education with a flexible schedule and reduced travel costs (Hung, et al., 2010).

The life of a military person was distinct and intense. Service members endured stressors that traditional college students did not encounter or had no reason to be concerned (Collins, Haijun, Yelich, & Favor, 2015). The ability for an institution of higher education to understand the complexities of the military lifestyle would enable them to meet the needs of this unique population. Designing online programs with the service member in mind enabled the college or university to meet the needs of the student while enabling the long-term success of the institution (Collins, et al., 2015).

Assistance and Support Programs

Educational assistance and support include, but are not limited to, employer aid for tuition, fees, books, supplies, and equipment (Tran & Smith, 2017). Civilian-focused educational assistance programs for service members have existed since the 1950s and are prompted by the rise and success of the GI Bill (Buryk, Trail, Gonzales, Miller, & Friedman, 2015).

Education programs had increased in the number of participants enrolled and represented a significant educational investment that employers placed in the students that took advantage of the opportunities. Miller (2012) stated that companies invested over $21 billion in 2011 on education assistance which was an 11 percent increase from the previous year. Educational assistance programs became exceedingly popular in the United States with 60 to 90 percent of civilian employers offering their workforce some type of education as a means of development (Byryk, et al., 2015). The types of employers that offered the program and the characteristics of the employees that took advantage of the opportunities varied. Financial assistance was prone to being offered in larger companies than in the smaller ones (Lerman, McKernan, & Reigg, 2004). Not all employees used the available financial assistance but for those that did, they tended to average 30 years of age; they had some higher education experience but not a degree; they worked full time; and they had been affiliated with the organization longer than those who did not participate with the assistance program (Capelli, 2004; Lerman, et at., 2004).

There were several similarities that military educational assistance programs had in common with the civilian-focused programs (Byryk, et al., 2015). Many of the military programs were only for eligible full-time service members which consisted of those who were on active duty or those who were reserve members on temporary active duty; most programs had a

time-in-service criteria. Military higher education programs usually covered tuition, fees, and

books. Also, similar to civilian-focused programs in many instances, there was a committal

requirement imposed on the service member if he or she decided to participate in a military

education program. While service members were highly encouraged to attain post-secondary

degrees, few organizations allowed for dedicated time off from the service member's job

requirements; most service members arranged to take courses in and around their duty schedule

in a manner that did not interfere with their required duties and obligations (Byryk, et al., 2015).

Education support for service members increased in their existence within the university

structure across the country (Burnett & Segoria, 2009; Dougherty & Woodland, 2009). Mentzer,

Black, and Spohn, (2015) investigated how the academic, financial, and social systems within

the university system supported service member persistence. Their study compared the support

systems earmarked for military-affiliated students against those for non-military students as a

means of determining how support coincided with persistence. Mentzer et al. (2015) confirmed

that the presence of support systems for military-affiliated student yielded positive effects upon

the service member population. McCready (2010) indicated that there was a relationship

between the military affairs programs at numerous universities with the financial contributors for

military-affiliated students; their correlated efforts supported students' academic and social

needs.

Tuition Assistance.   DoD Tuition Assistance (TA) programs were designed to

reimburse service members for tuition cost incurred in their efforts to pursue off-duty education.

The program was originally created and funded by the National Defense Authorization Act of

1972 (Buryk, Trail, Gonzales, Miller, & Friedman, 2015). While TA is a DoD authorized

program, each service branch maintains and manages their perspective accounts separately.

Service members can use TA funding as they pursue vocational, technical, undergraduate, and graduate education programs. The program provides active service members up to $250 per credit hour for tuition with a maximum of $4,500 per year; reserve component service members are eligible as long as they are on an active duty status or as allowed by the policy of their specific service branch. Tuition Assistance payments are made directly to the institution; however, service members that fail to attain a passing grade or fail to complete the course without an approved withdrawal are required to repay all TA incurred costs (Buryk, et al., 2015).

Veterans Affairs Benefits. In 1944, the Servicemen's Readjustment Act (GI Bill) was passed and was noted as the means to education and professional advancement (Humes, 2006). This assistance program and the Bonus March of 1932 were designed with the intent of connecting service members with education rather than having them enter an existing job market that was already inundated with an uneducated workforce (Mentzer, et al., 2015). The financial support enabled by the GI Bill allowed many service members to attend institutions of higher education immediately following World War II. The increased access to the benefit and the expanded programs aided service members in attaining their educational desires. Advising services, tutoring assistance, and developmental courses were incorporated into the eligible programs that were established to meet the increasing service member population need (Casazza, 1999). From its inception until the present, the GI Bill had been modified numerous times often coinciding with significant military conflicts (Bannier, 2006). These advancements ensured that service members received the educational courses they required, at an institution of higher education of their choice, and within the timeframe that was conducive to them (Bannier, 2006).

State Academic Support. States that have a significant number of military personnel as residents or serving at military installations for a specified amount of time can establish policy

dedicated to assisting service members earn their post-secondary degrees. Many states have

partnering efforts between themselves and the Department of Veteran Affairs to assist service

members with educational resources such as fee waivers, payment deferments, and medical

referrals (Lokken, Pfeffer, McAuley, & Strong, 2009). Other states that do not have a military

installation within its jurisdiction but have a significant military population can establish

military-focused policy. Indiana is a state that does not have a military installation but does have

a significant military population; the state has made significant higher education contributions in

the past decade to support service members in earning their post-secondary degrees (Hitt,

Sternberg, MacDermid-Wadsworth, Vaughan, Carlson, Dansie, & Mohrbacher, 2015). The State

of Virginia has policy that serves the needs of its military and veteran population. In guidelines

issued by the State Council of Higher Education for Virginia (SCHEV), it states that the

governing boards of each public institution of higher education may implement policies with the

purpose of awarding academic credit to military-affiliated students; this is for the higher

education credit and educational experience they had gained from serving in the Armed Forces

(State Council of Higher Education for Virginia, 2016).

Services

Various institutions of higher education have several types of services available as an

enabling benefit for students (Dey & Cruzvergara, 2014). Services include but are not limited to

assessments, assistance, counseling, guidance, diagnostics, information, rehabilitation, referrals,

and training (Kaya, Chan, Rumrill, Hartman, Wehman, Iwanaga, Pai & Avellone, 2016).

Service members may have qualified as being eligible recipients for these services as in

the same right as their traditional student counterparts. Institutions of higher education emplaced

services earmarked for students that may have needed to assist them with many of the unforeseen

issues associated with the college and university setting. The availability of services that supported service members' needs and requirements was a crucial enabling factor for them when selecting an institution of higher education.

Hitt, et al., (2015) researched various colleges and universities to inquire with staff and administrators about admissions, financial aid, academic, and student service policies and programs. From the institutions contacted, their research revealed many had the ability to award academic credit for military education and training, adjust application fees, and to refer service members to outside agencies for other disability service. Institutions also reported the capability of providing service to military family members and expressed other support through student veterans' organizations. Institution type and size, degrees offered, and the presence of graduate programs were related to student retention. Many institutions of higher education understood the needs of service members and made revisions within existing programs as a means of greatly assisting them attain their post-secondary degrees (Hitt, et al., 2015).

Tutoring. Service members attending institutions of higher education may have required additional support for the demands that academics imposed upon them (Lange, Sears, & Osborne, 2016). Services such as tutoring may have been required to propel students to optimal performance. Peer and personal tutoring embedded as either an institutional or volunteer service within institutions of higher education were typically put into place as a means of offering academic and personal support to enrolled students. Generally, tutors provided assistance with course work and offered advice and information to students pertaining to the issues which they may have been concerned. Sosabowskis, Bratt, Herson, Oliver, Sawers, Taylor, Zahoui, and Denyer (2003) indicated that students portrayed tutoring as a designed technique used for peer and professional mentors to listen, to assist, and to review academic progress. Students

suggested that tutors listen to personal problems and serve as a conduit between the student and the institution. Tutoring potentially enabled students to make connections between the multiple aspects of the college and university and the different elements of the education experience. In their study, Sosabowskis et al., (2003) found that a standard tutoring designed as a "one-size-fits-all" was not applicable to every student (p. 106). In addition, this finding would also apply to the service member as he or she may have had a background different than the traditional college student. Service members may have required tutors who were accommodating to their needs: the duration of the meetings, the flexibility in scheduling, the changing of meeting locations, and the consideration in adjusting the number of times they meet (Sosabowskis et al., 2003). The tutoring specifics would have to have been an agreement between the service member and the tutor.

MacFarlane (2016) stated that tutors were faculty and staff designees charged with supporting the student as a means of encouraging their participation in learning. There were various particulars which could have included the following: supporting a transition to the college and university setting, explaining degree plans, monitoring academic progress, and encouraging participation in extra-curricular activities. These could have been important for service members especially if there were a need for them to communicate with a designated point of contact when faced with academic and personal emergencies (MacFarlane, 2016). The tutor could have demonstrated those enabling characteristics to service members and had the potential to be beneficial to them when providing guidance on addressing certain situations which they may not have had the experience in handling. However, if the tutor deemed that a service member exhibited actions that exceed his or her tutoring boundaries or capabilities, the service member would have been advised to seek additional assistance via a trained professional

(MacFarlane, 2016). Similar coaching and mentoring, tutors assist students develop an understanding of existing situations; tutors provide support and help students find solutions to problems they are facing (Raisbeck, 2012). In certain instances, tutors may have assisted service members seek academic or professional advice.

Advising and Counseling. Academic advising is a well-defined service on college and university campuses that provide students with means of interacting with a dedicated institutional representative (King, 1993). To provide guidance and structure pertaining to academic counseling, the National Academic Advising Association (NACADA) founded in 1979, is a global community of academic advisors with the focus for providing quality guidance to higher education students. NACADA (2017) regards advising as the following: as integral to the higher education mission; as important for promoting student membership in the higher education community; as vital in facilitating critical thinking; and essential for preparing students for their roles and responsibilities as citizens.

Advisors were critical in providing support, encouragement, and assistance to students as they encountered the education process at four-year colleges and universities (King, 1993). The ability to scholastically advise students had become a crucial element of the academic structure for many institutions of higher education and would remain an essential function of the duties of higher education instructors (Yarbrough, 2002). Suvedi, Ghimire, Millenbah, and Shrestha (2015) stated that colleges and universities included academic advising as a means to inform students about academic requirements, to assist them in locating useful resources, and to aid them in becoming familiar with the college and university setting. For those students who were unfamiliar with the order and process of registering for higher education courses, advisors assisted them in synchronizing classes and course loads in a manner that best supported

completing their degree requirements in the most efficient time possible (Suvedi, et al., 2015).

Advising was highly important for students as many were not accustomed to the course-

registration process since the majority of them were on a restricted timeline to complete their

post-secondary degrees (Christian & Sprinkle, 2013). The advising processes that were

developed, evaluated, and periodically refined had the probability of being sustained longer

(Yarbrough, 2002).

Wilson and Smith (2012) investigated the experiences service members encountered

when entering higher education and how their experiences compared with their civilian adult

learner counterparts. To best understand those aspects that service members considered

important, Wilson and Smith (2012) sought to gain input from advisors who had the experience

assisting service members as they pursued higher education. The advising professionals revealed

that when guiding service members, it was best to understand what they considered to be their

important life mission and to ensure an adult learning theory corresponded with their beliefs. For

example, a service member's intention for joining the military could have been for the

educational benefits; however, once enlisted, he or she may have found that their chain of

command was not capable of supporting that particular life mission at that precise time.

Therefore, a crucial enabler would be for the advising professionals to understanding the service

member's life mission as part of adult learning theory when advising him or her on the post-

secondary curriculum and course selections (Wilson & Smith, 2012).

Counseling and mental health centers assisted service members in their academics and

the social adjustment they encountered while transitioning to the post-secondary environment

(Lange, Sears, & Osborne, 2016). Albright, Fletcher, Pelts, and Taliaferro (2017) stated that

having an understanding of mental health services for service members may increase their

chances of success; this could influence service members' decisions on selecting the institution of higher education they would attend for earning their post-secondary degrees.

      Installation Education Centers. Many military installations have education centers where service members can go to seek assistance on education-related matters such as selecting an institution of higher education, enrolling into a college or university, or transferring from one institution to another (Wilson, 2014). Education centers may have college and university representatives who may answer specific questions pertaining to their institution or provide admission assistance. The college or university may have offered classes on the installation to service members; as such, they could have remained in close proximity to their family members who were living on or near the installation. Education centers may have academic advisors and education counselors; those persons may understand how to navigate their specific DoD education portal and may have known how to best inform service members of how to use their benefits in a manner that assisted them in earning their post-secondary degree (Wilson, 2014).

Professional Associations and Networks

      Membership in professional associations and attending professional meetings were deemed as important entities within career development (Cottrell, Girvan, & McKenzie, 2009). Networks were an opportunity for students to join and sustain a community of professionals, to engage in methods in seeking assistance, and to develop a relationship to professional learning (Forbes, 2017). Many students had little information of professional associations and were not aware of the importance of attaining a membership within the association; it was important for advisors and faculty to encourage and promote professional association membership to their students and to stress the significance of belonging to them (Mata, Latham, & Ransome, 2010). Attending association meetings allowed its affiliates to network with others of similar interests,

to share like experiences, and to interact with others with shared perspectives on unique issues (Mata, Latham, & Ransome, 2010); association membership could have provided national-level affiliation, camaraderie, and fellowship to its members who were seeking to attain post-secondary degrees. Many national level associations may have had regional and state offices where its members could have sought personalized assistance at a local office or regional headquarters for the association.

Council of College and Military Educators. The Council of College and Military Educators (CCME) is a network that originated in the early 1970s from a group Education Service Officers (ESO's) seeking to exchange ideas on serving service members seeking to attain post-secondary degrees (Council of College and Military Educators, 2016). The CCME promotes and provides educational programs and services and facilitates communication between the membership and the DoD educational support network. The CCME functiones as an active proponent for military education service provider members. The membership consists of military educators, civilian educators, post-secondary educational institutions, and those businesses that provide education products and services. The CCME provides a forum where information is exchanged on educational programs as well as strategies and innovation among its members and associated partners. The CCME's partnership with DoD Education Agency is focused on ensuring education providers for service members provide quality education that is within DoD policy and remains within regulatory compliance.

To provide assistance at the state level, the Advisory Council on Military Education (ACME) is a state component of the CCME dedicated to concentrating on military education issues within their respective states. The ACME ensures that (1) policies are in place to facilitate the acceptance and transfer of credit for service members, (2) educational improvement is

ongoing within their respective state, and (3) educational programs for service members are accessible in tuition costs, institution locations, and course schedules (Council of College and Military Educators, 2016).

       Servicemembers Opportunity Colleges. Servicemembers Opportunity Colleges (SOC) is a DoD supporting agency established in 1972 with the goal of assisting service members in obtaining their higher education goals (Evans, Pellegrino, & Hoggan, 2015). Servicemembers Opportunity Colleges facilitates the educational opportunities for service members experiencing difficulties completing their post-secondary degrees due to their inconsistent presence at their duty stations and frequent moves. Servicemembers Opportunity Colleges functions in conjunction with the DoD to monitor the partnering institutions of higher education that supported service members with the intention of improving voluntary post-secondary education opportunities for service members worldwide (Servicemembers Opportunities College, 2016). The DoD funds SOC through a contract with the American Association of State Colleges and Universities (AASCU) which is managed by DANTES.

       Servicemembers Opportunity Colleges facilitates a membership consortium consisting of member schools that provide educational opportunities for service members who frequently relocate which has led to the difficulty of degree completion (Evans, Pellegrino, & Hoggan, 2015). Servicemembers Opportunity Colleges is a cooperative civilian and military program designed to connect service members to institutions of higher education that provide high quality education while (1) ensuring service members receive the maximum amount of academic credit for military training and experience, (2) providing alternative tests to ensure service member proficiency in particular subjects; (3) ensuring those credits transfer among partnering

institutions of higher education so that service members can attain their educational goals in the shortest time possible (Servicemembers Opportunities College, 2016).

Servicemembers Opportunities College publicized its membership being 1,900 accredited community colleges and four-year colleges and universities in the U.S. and Virgin Islands that offered service members opportunities to earn post-secondary degrees (Evans, Pellegrino, & Hoggan, 2015). Servicemembers Opportunities College bases its practices and standards on guidelines aimed at protecting the interest of service members; it ensures (1) clear and concise communications with service members, (2) appropriate enrollment and recruitment policies for institutions of higher education, (3) clear and succinct institutional fees, (4) appropriate institutional admissions policies and practices for selected courses and programs, and (5) a definitive enrollment process that includes designated university representatives who provide assistance for service member concerns and issues. Servicemembers Opportunities College, also, ensures that servicing institutions adhere to government policies and procedures and that they maintaine their accreditation with their official accrediting body (Servicemembers Opportunities College, 2016).

Institutions that expressed interest in becoming SOC-affiliated members must have been willing to "(1) implement an acceptable transfer policy, (2) decrease academic residency requirements, (3) acknowledge American Council on Education guidelines for accepting credit for military experience, and (4) recognize at least one nationally recognized standardized test" (Evans, Pellegrino, & Hoggan, 2015, pp. 52-53).

Academic Institutions for Military Students. The Academic Institutions for Military Students (AIMS) Network was active from 2014 to 2017. The network supported service members by fostering a partnering coalition among those institutions of higher education that

were within close proximity to military installations. The partnerships provided the service members the ease of transferring among participating institutions of higher education. This facilitated increased degree completion for service members and encouraged their academic engagement through the creation and sharing of successful policies, programs, and procedures (Academic Institutions for Military Students, 2015).

The network collaborated to assist service members transfer between partnering institutions of higher education as they were reassigned from one military installation to another while they continuously pursued post-secondary degrees. Initiatives to assist service members included transferring credit among partnering institutions, promoting campus support initiatives, and providing a support structure within the network. The AIMS had five major goals that focused on its ability to assist service members which included (1) establishing a network of institutions of higher education near military installations that had support personnel at each location, (2) building a collection of academic programs and common curriculums that provided familiarity to service members as they transitioned to and from multiple installations, (3) creating an articulation among the partnering installations that would have facilitated course integration more efficiently, (4) providing on-campus opportunities for service members which would allow them to experience college social activities, and (5) utilizing technology among the partnering institutions of higher education which facilitated a collaborative network focused on service member degree completion (Academic Institutions for Military Students, 2015). Member institutions of the AIMS Network periodically met at centralized locations in the U.S. or during national education-specific conventions. During those meetings, member institutions provided updates on their individual initiatives and officials from the AIMS Network discussed

collaborative network efforts that assisted service members expeditiously attain their post-secondary degrees (Academic Institutions for Military Students, 2015).

American Council on Education. The American Council on Education (ACE) is the major coordinating body for the nation's colleges and universities. The organization represents nearly 1,800 college and university presidents and executives. The ACE is the only major higher education association to represent all types of U.S. accredited, degree-granting institutions: two-year and four-year, public and private (American Council on Education, 2017).

Soares (2013) described college and university presidents as "pivotal figures in the nation's pursuit of global competitiveness, economic opportunity, and an engaged citizenry" (p. 1). The presidents of the nation's higher education system led a diverse ecosystem of 4,600 higher education institutions (all not members of ACE) that provided the education and research that was critical to individual success and our national prosperity (Soares, 2013).

Of the ACE colleges and universities, there were 75 member institutions that had been with the organization for over 10 years. The ACE assembled representatives from all regions to confront the toughest higher education challenges as a major body with the emphasis being on improving access as a means of enhancing student preparation (American Council on Education, 2016).

The ACE has developed institutional strategy, technology, and public policy in higher education change as a four-part framework to direct internal thinking and analysis. That developmental framework includes:

1. "Institutional models" which encompasses the different types of institutions (e.g., community colleges, four-year colleges and universities, nonprofits, and for-profits that deliver higher education).

2. "Technology" that transforms the processes used in higher education which include technology-enabled learning, social media for learning and counseling, and learning management systems.

3. "Education Partner Networks" which encompass any of the partners that an institution of higher education may work with to achieve its mission.

4. "Public Policy and Standards Environment" that embody the dynamic mix of technology, institutional modeling, and delivery networks created to demonstrate new ways of providing education and organizing resources (Soars, 2013, p. 2).

The ACE displays its commitment to service members by developing academic centers and networks to assist them in entering higher education. The ACE, also, have Military Programs that assist in recommending equivalent college credits for the various types of military training and service members' experiences (American Council on Education, 2017).

The ACE College Credit for Military Service program assisted service members in transferring college credit earned from military service experience and that earned from military training and experience. Many institutions of higher education offered services that helped assist service members in organizing a portfolio that encompassed their military education and training, job skills, and prior college experiences (Wilson, 2014); these were transcribed into higher education credit which aligned with courses offered by the college or university. As well, all service members (except Air Force) had their personal joint service transcripts; the program was a single-source, lifetime documentation for each service member which listed all of their military training, education, schooling, and experience that they could use to apply for credit transfer at institutions of higher education (Gonzalez, Miller, Buryk, & Wenger, 2015). A significant number of service members came to higher education with transfer courses and

knowledge gained through military service which in many cases, counted towards their degree programs (Wilson, 2014).

Summary

The review of literature presented the motivating factors supported by enablers as critical influences on the decisions of service members to earn their post-secondary degrees. The literature highlighted the criticality of service members who were attending institutions of higher education to advance their education. The researcher identified three areas that framed the research structure and served as the literature review foundation. The foundational areas were Education Variances, The Need for Post-Secondary Education, and Recent Evolution of Military Education.

Motivation was quoted as the desire or the reason for an individual to accomplish something (Charles & Senter, 1995); learners were motivated when it was possible for them to improve or when it was probable for them to receive a reward for their efforts (Lim & Kim, 2003). Extrinsic and intrinsic were the two major types of motivation that pertained to individuals and their actions. Extrinsic motivation occurred when an individual performed an action to (1) earn a reward for competition or performance, (2) to receive an evaluation by others for his or her performance, or (3) to avoid adverse action. Intrinsic motivation occurred when an individual performed an action because it was personally rewarding or because it consisted of a personal challenge, which involved curiosity of a task or mastery of an event (Lim & Kim, 2003).

The researcher identified three major motivational factors for this study: satisfaction, career enhancement, and commitment. Supporting elements to these factors were researched and assisted in framing the survey questions pertaining to motivation for this study.

Enablers included factors such as contextual or environmental influences that had an impact on the development of student skills (Christenson & Anderson (2002). These factors allowed and assisted service members to participate in their own learning; these factors contributed to them earning their degrees which were also considered enablers. The services that DoD provided to service members starting or continuing their education were considered enablers (McGovern, 2012); they were enablers because their goals were to enhance the service members' educational experience (Kirchner, 2015).

Prominent enabling factors the researcher identified were: institutions of higher education, assistance and support programs, services, and professional associations and networks. Essential components that reinforced these factors were researched and assisted in framing enabler-based survey questions for this study.

The literature identifying the motivating and enabling factors assisted the researcher with developing survey questions that were used to answer the research questions that pertained to this study. The demographics of the research population and the methodology of the analysis were discussed in Chapter III.

CHAPTER III

METHODS AND PROCEDURES

This chapter describes the methods and procedures that were used to conduct this study. It provides a definitive overview of the population, research variables, and instrument design. The data collection method, the statistical analysis used, and the data collection instrument are discussed.

Population

The researched population consisted of service members enrolled in post-secondary degree programs as veteran military students. Because of Department of Defense (DoD) policies and regulations, service members affiliated with the military in an active or reserve status and those retired after 20 or more years of service were not eligible to participate in the study. The researcher was only permitted to invite service members who were fully discharged and separated from the military. Any service member still serving in an active or reserve capacity or retired from any DoD entity was not granted permission to participate.

A total of 781 service members were invited to participate in the study; this consisted of 463 service members who were students enrolled at a four-year institution of higher education in the coastal southeast Virginia area and 318 service members who were students enrolled at a two-year institution of higher education in the central Virginia area. This sample of the population represented a heterogeneous demographic consisting of post-secondary service members currently enrolled in post-secondary degree programs as veteran military students. The institutions where the service members were enrolled were selected based on their proximity to the researcher and the institutions' willingness to assist in gaining participant access.

The researcher sought the support from the two directors of the military-affiliated student assistance at the institutions. The directors provided the number of service members enrolled at their institution and verified that those students had an account within the institution's global email system. Having institutional email system access was a requirement for survey distribution and participation in the study.

It would have been optimum to have had service members participants from other institutions of higher education in the study. However, due to the limitations and restrictions on automation, equipment, personnel, time, and access to student information, that option was not as feasible.

To accommodate the data gathering requirement from this population, the researcher distinguished the type of participants who would have sufficient knowledge and understanding of the military life style and its impact on service members. The researcher identified institutions with sufficient and representative students who had military-specific awareness and experience.

A purposive sampling technique was determined as the best method of data collection for this type research. In purposive sampling, people of a specific group or unit are chosen for the purpose of attaining data that fits specific requirements (Leedy & Ormrod, 2013). Researchers often develop situated knowledge of the region in order to understand the specific population (Barratt & Lenton, 2015). In the same manner within this study, the researcher employed a purposive sampling procedure by gathering data from service members. The researcher used purposive sampling to ensure the respondents would best represent the population and could provide data from a perspective (Leedy & Ormrod, 2013). The researcher created criteria to include participants were former service members seeking higher education degrees. Participants who were currently affiliated with the military in an active or reserve status and had

retired after 20 or more years of service were excluded. The participants best fit the demographics of a specific population (e.g., rank category, gender, semesters (quarters) completed, age range, and highest education level).

Research Variables

The purpose of study is to estimate the extent to which change is caused by the influence of independent variables (Patten, 2012); the findings were reported as the effects, outcome, or results of the study. There were two main factors that the researcher used in this study: motivation and enabler.

Ryan and Deci (2000) described motivation as being activated or energized to accomplish a specific goal or task. Charles and Senter (1995) expressed that motivation was the desire or the reason for an individual to accomplish something. Motivation could be interrelated extrinsic and intrinsic factors that may have been inherent within service members as adult learners (Francois, 2014). Motivating factors derived from literature included the desire for satisfaction, the need for career enhancement, and the commitment to attain a post-secondary degree. Participant motivation input was retrieved from their responses to the data-collection instrument which pertained to overall participant motivation levels for earning post-secondary degrees.

Christenson and Anderson (2002) described student enablers as factors including contextual or environmental influences that had impact on developmental skills. Elliott, DiPerna, and Malecki (2002) stated that academic enablers could be attitudes and behaviors that facilitated academic instruction. Analyzing enabler agents could improve the quality of higher education institutions (Calvo-Moro, Leal, & Roldán, 2006). Enabling factors identified in the literature included institutions of higher education, assistance and support programs, services, and professional associations and networks. Participant enabler input was retrieved from their

responses to the data-collection instrument which pertained to overall participant enabler satisfaction levels for earning post-secondary degrees.

Data Collection Instrument Design

The data-collection instrument format was adopted from Keenan (2012) and consisted of closed-form Likert-scale questions and open-form questions (see Appendix A). Likert-scale questions were displayed in a range from which the participant selected the one option that best aligned with his or her preference or views (Paris, Târcolea, & Dumitraş, 2015).

The research questions pertaining to motivation were based on studies from: Alexander and Goldberg, 2011; Başaran, 2000; Brown, 1996; Chiocchio and Lafreniére, 2009; Hamidi, Mohammadibakhsh, Soltanian, and Behzadifar, 2017; Hartog and Belschak, 2007; Lee and Pang, 2014; Lowin, 2003; Meyer and Herscovitch, 2001; Perreira and Berta, 2016; Pizan and Ellis, 1999; Rand and Cheavens, 2009; Solinger, van Olffen, and Roe, 2008; Spector, 1996; and Yildirim, 2015. Research from these studies were used to develop the survey questions that assisted the researcher in answering RQ$_1$, What factors motivated service members to earn a post-secondary degree?

The research questions pertaining to enablers based on studies from: Abdul-Amin, 2016; Agasisti and Johnes, 2015; Burnett and Segoria, 2009; Buryk, Trail, Gonzales, Miller, and Friedman, 2015; Capelli, 2004; Dougherty and Woodland, 2009; Ekman, 2013; Guitérrez-Romero, Haubrich, and McLean, 2008; Lerman, McKernan, and Reigg, 2004; McCready, 2010; Mentzer, Black, and Spohn, 2015; Miller, 2012; Ruhupatty and Maguad, 2015; Tran and Smith, 2017; and Zhou, Tijssen, and Leydesdorff, 2016. Research from these studies were used to develop the survey questions that assisted the researcher in answering RQ$_2$, What factors enabled service members to earn a post-secondary degree?

Directions on the survey instructed the participant to read each question carefully and to select the answer that best pertained to them. Participants were asked to follow the computer screen instructions until they completed the entire survey; furthermore, they were informed that their participation was voluntary and that they could stop at any time without consequence.

Participants were asked to answer the two following questions to determine if they were eligible to take the survey:

1. Are you currently serving in an active or reserve status in the U.S. Armed Forces?

2. Did you retire after 20 years of service from the U.S. Armed Forces?

If any participant answered yes to either of the two questions, they were informed that the DoD had not granted research approval for their participation in the study. The participants were asked to exit the survey and were given a word of thanks for their service.

Participants who were eligible to continue with the survey were instructed to proceed to the next page and doing so constituted their consent for taking the survey. They were informed that their answers and identity would be kept strictly anonymous at all times.

The first section pertained to service member motivation. As a precursor for the survey questions (SQ) 1-10, participants were asked what were the factors that motivated them in attaining their degree. Participants were instructed to select one response that best indicated their level of agreement or disagreement. For the benefit of the participants, the researcher defined motivation as a desire or the reason for wanting to accomplish a goal or a task.

There were 10 survey questions pertaining to motivation which were modeled from Keenan (2012); these questions were related to the researcher's literature review. The participants were provided a five-point Likert-scale to select the best answer that best suited their opinions. The scale ranged from the following: 1=Strongly Agree; 2=Agree; 3=Neither agree

nor disagree; 4=Disagree; and 5=Strongly Disagree. The motivating factors were attaining

satisfaction (SQ 1); achieving personal growth (SQ 2); forming a professional identity (SQ 3);

expanding knowledge base (SQ 4); establishing resilience (SQ 5); fulfilling the goals of

professional development (SQ 6); enhancing personal and professional education (SQ 7);

assisting in attaining a job or a career promotion (SQ 8); allowing in being mentor for others (SQ

9); and demonstrating commitment (to self, family, or career) (SQ 10). Each question was

linked to a factor that had been researched from supporting literature. See Table 2.

Table 2

Literature Review, Survey Question Synchronization for Motivation

Survey Question	Researched Factor	Relating Literature
1	Satisfaction	Spector (1996); Pizan & Ellis (1999); Başaran (2000) Synder (2002); Rand & Cheavens (2009); Yildirim (2015)
2	Achieving Personal Growth	Riggs & Hellyer-Riggs (2009); Arendale & Hane (2014)
3	Forming a Professional Identity	Bragg (1976); Murdock, Stipanovic, & Lucas (2013); Murray (2013); Wilson, Liddell, Hirschy, & Pasquesi (2016)
4	Expanding Knowledge Base	Simpson (1997); Kohl (2010); Robelia, Greenhow, & Burton (2011)
5	Establishing Resilience	Durmont & Provost (1999); Walker & Salt (2006); Krasny, Lundholm, & Plummer (2010); Wild, Wiles, & Allen (2013); Smith & Hollinger-Smith (2015); Taormina (2015)
6	Professional Development	Evans (2014); Training & Doctrine Command (2015)

Table 2 (Continued)

Survey Question	Research Factor	Releating Literature
7	Personal & Professional Education	Alexander & Goldberg (2011); Sloat (2011)
8	Promotion	Kaplan & Ferris (2001); Department of the Army Regulation 600-8-19 (2008); Garcia-Izquierdo, Moscoso, & Ramos-Villagrasa (2012)
9	Mentor to Others	Eby (1997); Kram(1985a); Kram (1985b); Johnson & Ridley (2008); Yang, Xu, Allen, Shi, Zhang, & Lou (2011); Thomas & Thomas (2015)
10	Commitment	(Meyer & Herscovitch (2001); Hartog & Belschak (2007); Solinger, van Olffen, & Roe (2008); Chiocchio & Lafreniére (2009); Perreira & Berta (2016); Hamidi, Mohammadibakhsh, Soltanian, & Behzadifar (2017)
10	Commitment to Self	Farley (1986); Brickmann (1987); Novacek & Lazarus (1990); Hartog & Belschak (2007)
10	Commitment to Family	Weigel, Bennett, & Ballard-Reisch (2003); Bouffard & Weiss (2008); Kumar (2016)
10	Commitment to Career	Blau (1989); Carson & Bedeian (1994); King (1997); Kidd & Green (2006); Fu (2011)

The feasibility of there being other motivational factors that were not mentioned in SQ 1-10 existed. Participants were asked to describe any other additional factor(s) they considered as

motivating factors in earning a post-secondary degree; this was permitted in an open-form type question (SQ 11).

The next section pertained to service member enablers. As a precursor for the SQ 12-19, participants were asked what were the factors that enabled them in attain their degree. Participants were instructed to select one response that best indicated their level of agreement or disagreement. For the benefit of the participants, the researcher described enablers as those entities which included social influences, programs, policies, regulations, or services that provide assistance to an individual.

There were eight survey questions pertaining to enablers which were modeled from Keenan (2012); these questions were related to the researcher's literature review. The participants were provided a five-point Likert-scale to select the best answer that best suited their opinions. The scale ranged from the following: 1=Strongly Agree; 2=Agree; 3=Neither agree nor disagree; 4=Disagree; and 5=Strongly Disagree. The factors were the type of college or university (traditional; two-year or community college; online institution) (SQ 12); the Tuition Assistance (TA) program offered by the branch of service (SQ 13); the use of Veteran Affairs (VA) benefits (SQ 14); state academic support for service members (e.g., Virginia, Texas, North Carolina, etc.) (SQ 15); the ability of the college or university a service member attends to offer tutoring services (SQ 16); the ability of the college or university a service member attends to offer advising and counseling services (SQ 17); the education center at the military installation where the service member is assigned (SQ 18); and membership in professional associations, organizations, and networks that a service member may join (SQ 19). Each question was linked to a factor that had been researched from supporting literature. See Table 3.

Table 3

Literature Review, Survey Question Synchronization for Enablers

Survey Question	Researched Factor	Literature Source
12	Institutions of Higher Education	Guitérrez-Romero, Haubrich, & McLean (2008); Ekman (2013); Agasisti & Johnes (2015); Ruhupatty & Maguad, (2015); Abdul-Amin (2016); Zhou, Tijssen, & Leydesdorff (2016)
12	Traditional	Erdle, Murphy, & Rushton (1985); Bonwell & Elson (1991); Crosling, Thomas, & Heagney (2008); Whiteman, Mroczek, Macdermaid-Wadsworth, & Barry (2013); McCaslin, Thiede, Vinatieri, Passi, Lyon, Armstrong, & Chitaphong (2014); Bikse, Lusena-Ezera, Rivza, & Volkova (2016)
12	Two-year or Community Colleges	Elmaraghy & Elmaraghy (1996); Carnevale, Smith, & Strohl (2013); Cohen, Brawer, & Kisker (2014); Armstrong (2015); Chang & Wang (2016); Hammons & Orf (2016); Miller, Grover, Deggs, D'Marco, Katsinas, & Adair (2016); Rosenow, Morrison-Graham, & Ozolins (2016); Kisker, Weintraub, & Newell (2016); Patton (2017)
13	Online Institutions	Russell (1999); Tucker (2001); Allen, Bourhis, Burrell, & Mabry (2002); York (2008); Lee, Suh, & Kim (2009); Hung, Chou, Chen, & Own (2010); Wilson (2010); Joo, Lim, & Kim (2011); Driscoll, Jicha, Hunt, Tichavsky, & Thompson (2012); Yoo & Huang (2013); Collins, Haijun, Yelich, & Favor (2015)

Table 3 (Continued)

Survey Question	Researched Factor	Literature Source
13	Tuition Assistance program	Buryk, Trail, Gonzales, Miller, & Friedman (2015)
14	Veterans Affairs benefits	Casazza (1999); Bannier (2006); Humes (2006); Mentzer, Black, & Spohn (2015)
15	State support and policies	Hitt, Sternberg, MacDermid-Wadsworth, Vaughan, Carlson, Dansie, & Mohrbacher (2015); State Council of Higher Education for Virginia (2016)
16	Tutoring services	Sosabowskis, Bratt, Herson, Oliver, Sawers, Taylor, Zahoui, & Denyer (2003); Raisbeck (2012); Lange, Sears, & Osborne (2016); MacFarlane (2016)
17	Advising and counseling	King (1993); Yarbrough (2002); Wilson & Smith (2012); Christian & Sprinkle (2013); Suvedi, Ghimire, Millenbah & Shrestha (2015); Lange, Sears, & Osborne (2016); Albright, Fletcher, Pelts, & Taliaferro, (2017); National Academic Advising Association (2017)
19	Installation education center	Wilson (2014)
20	Professional associations and networks	Cottrell, Girvan, & McKenzie (2009); Mata, Latham, & Ransome (2010)

The feasibility of there being other enabling factors that were not mentioned in SQ 12-19 existed. Participants were asked to describe any other additional factor(s) they considered as enabling factors in earning a post-secondary degree; this was permitted in an open-form type question (SQ 20).

Survey questions 21 and 22 gathered data used to support independent variable measurers. Survey question 21 requested participants to rate their overall level of motivation for earning their college degree on a five-point Likert-scale. The scale ranged from the following: 1=Strongly Motivated; 2= Motivated; 3=Neither motivated nor unmotivated; 4= Unmotivated; and 5=Strongly Unmotivated. Survey question 23 asked participants to rate how satisfied they were with the enablers made available to them during their time in the military on a five-point Likert-scale. The scale ranged from the following: 1=Strongly Satisfied; 2= Satisfied; 3=Neither satisfied nor dissatisfied; 4= Dissatisfied; and 5=Strongly Dissatisfied.

The last section pertained to the individual participant demographics. There were five questions which the participants were asked to select the response that best pertained to them. The demographic questions asked the participants to provide information on their rank at discharge, number of semesters or quarters of coursework completed, sex, age, and highest education level attained. See Appendix A for a copy of the survey.

Data Collection Instrument Validation

The researcher opted to have the data collection instrument reviewed by a panel of service members with similar demographics of the intended population. The review was conducted to establish the content validity and to ensure the content within the data collection instrument would be easily comprehended and understood by the potential participants (Keenan, 2012). As well, the review provided a measure of caution by reducing any unforeseen survey navigational or data-entering issues which may have been encountered by potential participants while responding to the survey questions.

The researcher selected six individuals as reviewers for the data collection instrument. The reviewers were service members at a four-year institution of higher education. The

reviewers did not attend the same institution that the potential participants attended; however, they were of similar demographics of the intended population. Once the reviewers completed the reviewing tasks of the instrument and provided feedback, they were released from conducting any other assignment concerning the study; their contribution to the study was complete. The reviewers were not invited to later participate in the actual data collection pertaining to the study; their participation as reviewers was a one-time involvement with the study. The individual demographic of the each reviewer was as follows:

1. Female; enlisted; nine or more semesters (or quarters) of college or university course work completed; age range of 40-44; and had earned a bachelor's degree.

2. Male; enlisted; zero semesters (or quarters) of college or university course work completed; age range of 30-34; and had earned a high school diploma.

3. Female; enlisted; nine or more semesters (or quarters) of college or university course work completed; age range of 25-29; and had earned a bachelor's degree.

4. Female; enlisted; nine or more semesters (or quarters) of college or university course work completed; age range of 25-29; and had earned a bachelor's degree.

5. Male; enlisted; three to four semesters (or quarters) of college or university course work completed; age range of 20-24; and had earned a high school diploma.

6. Female; officer; nine or more semesters (or quarters) of college or university course work completed; age range 30-34; and had earned a bachelor's degree.

Each of the reviewers was given the opportunity to provide comments and recommendations for changes to the data collection instrument. Two reviewers did not note any

discrepancies. The researcher either made changes as recommended or explained why the

statements in question were written in the manner which they were. The comments and

recommendations were described in Table 4. See Table 4.

Table 4

Data Collection Instrument Validation Comments and Recommendations

Reviewer	Recommendation	Action
1	Do not refer to military pay grades (e.g., E-5, W-1, O-3, etc.)	Changed question to refer to rank categories (e.g., enlisted, warrant officer, officer) when inquiring on service members' rank
2	Focus on service members' professional development as the main emphasis of the question	Modified question to inquire about service members' professional development
3	Insert the word *and* in questions 11 and 20	The word *and* was inserted in questions 11 and 20
4	No discrepancies noted	No action required
5	No discrepancies noted	No action required
6	Review the survey to ensure that it was written in a manner that it could be easily comprehended by a junior service member in the same manner it would by a senior service member; keep it as simple as possible	Modified the survey so that it was easily comprehendible by all participants

Method of Data Collection

The Old Dominion University Institutional Review Board (IRB) granted approval for this

research prior to data being collected. The researcher arranged to brief the military-affiliated

student assistance center directors who were employed at the two institutions regarding the intent

of the study and the data collection procedures. The researcher explained the confidentiality

guidelines to ensure there was no ambiguity regarding information security. The directors

assisted by attaining names and rosters of the service members at their respective institutions;

also, they assisted by distributing the surveys to those students via their internal email systems.

The directors tallied the number of surveys distributed and accounted for those that were

returned as undeliverable. Those numbers were reported to the researcher as a means to account

for missing data in the analysis.

The email distributed to the participants introduced the researcher as a student conducting

a study pertaining to the motivating and enabling factors of service members seeking post-

secondary degrees. There was a link to the survey embedded within the introduction email. See

Appendix B. A follow-up email was sent 30 days later requesting those students that had not

responded to the survey to do so as soon as possible. See Appendix C.

The researcher used Qualtrics software to administer the survey. The features of the

program enabled the researcher to create a survey, have it emailed to the participants, and collect

the data that was used for analysis. Conducting the survey online provided accuracy in returned

information, created efficiency in consolidating the data, and enabled rapid responses from the

participants.

The researcher accessed the Qualtrics software with an assigned user name. The

researcher did not share the login information with any other person which assured research

confidentially. The responses from the participants were collected within the Qualtrics software.

The researcher was the only individual that had access to the data. Limited access ensured there

existed a level of confidence in safeguarding the participants' personal demographic information

and that the responses which aided in the data collection remained secured and confidential.

Summary

The methods that the researcher used to conduct this study was described in this chapter. The researcher selected service members currently enrolled in post-secondary degree programs. The purposive sampling technique enabled the researcher to select participants to serve as sample respondents; these selectees represented the service member population at institutions of higher education. The number of participants invited to participate in this study was provided; this sample represented a heterogeneous demographic of service members seeking post-secondary degrees.

A description of the factors which included satisfaction, career enhancement, and commitment were studied in order to determine their potential effect on the motivation of service members. Data regarding institutions of higher education, assistance support and programs, services, and professional associations and networks were studied in order to determine the level of satisfaction service members may have had for the enablers which supported their efforts towards earning post-secondary degrees.

The data collection instrument was described in this chapter. The researcher used a 27-question survey to collect data which included 20 closed-form Likert-scale questions, five demographic questions, and two open-ended questions. Ten of the closed-form Likert-scale questions focused on motivation and eight of the closed-form Likert-scale questions focused on enablers. The researcher collected the data by using Qualtrics software.

Finally, the procedures for analysis included descriptive statistics to determine frequencies, means, and standard deviations; One-Sample T-Test to determine the 95% confidence interval; and multiple regression analysis to determine significances. The data collected in this study were used to present the findings in Chapter IV.

CHAPTER IV

FINDINGS

The purpose of this study was to investigate what motivated and enabled military service members to earn a post-secondary degree. This problem was investigated to better inform institutions of higher education how to recruit and retain military-affiliated members and how to provide career-enhancing information to service members at institutions of higher education. The outcome of the study was reported in this chapter. This research was guided by the following research questions:

RQ$_1$: What factors motivated military service members to earn a post-secondary degree?

RQ$_2$: What factors enabled military service members to earn a post-secondary degree?

A 27 question survey was modified from Keenan (2012) to collect the required data necessary to answer the research questions. This chapter provided findings obtained from the survey listed as population studied, analysis of the survey questions, analysis of the variables, and summary.

Population Studied

Service members enrolled in two post-secondary degree programs were invited to participate in this study. There were 781 emails sent to service members inviting them to participate in the study; 463 service members were enrolled at a four-year institution of higher education in the coastal southeast Virginia area, and 318 service members were enrolled at a two-year institution of higher education in central Virginia. Responses from the participants were received in the online Qualtrics survey; the survey consisted of questions that pertained to the motivating and enabling factors for service members earning a post-secondary degree. One

hundred forty-one (18%) responses were received; 114 (n=114) participants of the 141 responses were eligible to participate with an eligibility rate of 81%. Excluded responses were from those participants who were either still affiliated with the military in an active or reserve status and those who had retired after 20 or more years of service. One participant did not answer questions after number 10 and did not complete the survey.

Analysis of the Survey Questions

Questions with Likert-scale selections were analyzed using descriptive statistics. To determine the percentage, mean, standard deviation, and the confidence interval for each Likert-scale question, a calculation was conducted; the mean score, as the central tendency, was determined based on that output.

Cronbach's alpha reliability coefficients were calculated for the Likert-type items administered in this survey and collected as primary data for this study. Individual coefficients were calculated for the total survey (18 items) and each of the subscales for motivation (10 items) and enablers (8 items). The resulting Cronbach's alpha coefficients were .87 for the total survey, .82 for the motivation scale, and .84 for the enablers scale. These estimates indicated a high level of internal consistency for the survey data collected in this study.

To obtain the answer to RQ_1, What factors motivated military service members to earn a post-secondary degree?, the researcher identified motivation as the factor with there being 10 independent variables, supported by literature, that influenced that factor. The 10 independent variables were used in an experimental manner to estimate the extent to which they could cause change to the factor motivation (Patten, 2012). Earning a post-secondary degree was the dependent variable. The 10 independent variables for service member motivation were the following:

1. Aid me in attaining satisfaction.

2. Assist me in achieving personal growth.

3. Assist me in forming a professional identity.

4. Assist me in expanding my knowledge base.

5. Assist me in establishing resilience.

6. Fulfill the goals of my professional development.

7. Enhance personal and professional education.

8. Assist me in attaining a job or career promotion.

9. Allow me to be a mentor for others.

10. Allow me to demonstrate commitment (to self, family, or career).

Descriptive statistics from the responses to the questions pertaining to motivation which consisted of the mean within the responses and standard deviation were calculated to present comparative data. The subscale factors used to attain data for motivation were satisfaction, career enhancement, and commitment; these were linked to specific questions within the survey. An open-ended question allowed participants to provide additional motivating factors that were not included within the survey. See Table 5 for the subscale factors and survey questions synchronization for motivation.

Table 5

Subscale Factors and Survey Questions Synchronization for Motivation

Factor	Survey Question	Analysis Concepts
Satisfaction	1-5	Descriptive Statistics to determine frequency, mean, and standard deviation.
		One-Sample T Test to determine 95% confidence interval
		Multiple regression analysis to determine significance
Career Enhancement	6-9	Same concept as Satisfaction
Commitment	10	Same concept as Satisfaction
Open Form to attain additional motivating factors	11	Individual analysis to determine and record recurring themes

Participants were asked Survey Question (SQ) 1, earning a college degree will aid me in attaining satisfaction. Seventy (61.4%) participants selected Strongly Agree, 36 (31.6%) participants selected Agree, eight (7%) participants selected Neither Agree nor Disagree; there were no (0%) selections for Disagree and Strongly Disagree. The mean score for SQ 1 was 1.46. The standard deviation was .626. The 95% confidence interval was 1.34 to 1.57. The mean and confidence interval suggested that the participants strongly agreed with this being a motivating factor. See Table 6.

Table 6

Aid Me in Attaining Satisfaction

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	70	61.4	1.46 (.626)	(1.34, 1.57)
Agree	36	31.6		
Neither Agree nor Disagree	8	7.0		
Disagree	0	0		
Strongly Disagree	0	0		

Participants were asked SQ 2, earning a college degree will assist me in achieving

personal growth. Seventy-nine (69.3%) participants selected Strongly Agree, 31 (27.2%)

participants selected Agree, two (1.8%) participants selected Neither Agree nor Disagree, two

(1.8%) participants selected Disagree; there was no (0%) selection for Strongly Disagree. The

mean score for SQ 2 was 1.36. The standard deviation was .612. The 95% confidence interval

was 1.25 to 1.47. The mean and confidence interval suggested that the participants strongly

agreed with this being a motivating factor. See Table 7.

Table 7

Assist Me in Achieving Personal Growth

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	79	69.3	1.36 (.612)	(1.25, 1.47)
Agree	31	27.2		
Neither Agree nor Disagree	2	1.8		
Disagree	2	1.8		
Strongly Disagree	0	0		

Participants were asked SQ 3, earning a college degree will assist me in forming a

professional identity. Sixty-nine (60.5%) participants selected Strongly Agree, 31 (27.2%)

participants selected Agree, nine (7.9%) participants selected Neither Agree nor Disagree, four

(3.5%) participants selected Disagree and one (.9%) participant selected Strongly Disagree. The

mean score for SQ 3 was 1.57. The standard deviation was .852. The 95% confidence interval

was 1.41 to 1.73. The mean and confidence interval suggested that the participants strongly

agreed with this being a motivating factor. See Table 8.

Table 8

Assist Me in Forming a Professional Identity

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	69	60.5	1.57 (.852)	(1.41, 1.73)
Agree	31	27.2		
Neither Agree nor Disagree	9	7.9		
Disagree	4	3.5		
Strongly Disagree	1	.9		

Participants were asked SQ 4, earning a college degree will assist me in expanding my

knowledge base. Eighty-one (71.1%) participants selected Strongly Agree, 29 (25.4%)

participants selected Agree, four (3.5%) participants selected Neither Agree nor Disagree; there

was no (0%) selection for Disagree and Strongly Disagree. The mean score for SQ 4 was 1.32.

The standard deviation was .540. The 95% confidence interval was 1.22 to 1.42. The mean and

confidence interval suggested that the participants strongly agreed with this being a motivating

factor. See Table 9.

Table 9

Assist Me in Expanding My Knowledge Base

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	81	71.1	1.32 (.540)	(1.22, 1.42)
Agree	29	25.4		
Neither Agree nor Disagree	4	3.5		
Disagree	0	0		
Strongly Disagree	0	0		

Participants were asked SQ 5, earning a college degree will assist me in establishing resilience. Thirty (26.3%) participants selected Strongly Agree, 38 (33.3%) participants selected Agree, 35 (30.7%) participants selected Neither Agree nor Disagree, six (5.3%) participants selected Disagree and five (4.4%) participants selected Strongly Disagree. The mean score for SQ 5 was 2.28. The standard deviation was 1.052. The 95% confidence interval was 2.09 to 2.48. The mean and confidence interval suggested that the participants agreed with this being a motivating factor. See Table 10.

Table 10

Assist Me in Establishing Resilience

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	30	26.3		
Agree	38	33.3	2.28 (1.052)	(2.09, 2.48)
Neither Agree nor Disagree	35	30.7		
Disagree	6	5.3		
Strongly Disagree	5	4.4		

Participants were asked SQ 6, earning a college degree will fulfill the goals of my professional development. Sixty-two (54.4%) participants selected Strongly Agree, 37 (32.5%) participants selected Agree, eight (7.0 %) participants selected Neither Agree nor Disagree, six (5.3%) participants selected Disagree and one (.9%) participant selected Strongly Disagree. The mean score for SQ 6 was 1.66. The standard deviation was .891. The 95% confidence interval was 1.49 to 1.82. The mean and confidence interval suggested that the participants strongly agreed with this being a motivating factor. See Table 11.

Table 11

Fulfill the Goals of My Professional Development

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	62	54.4	1.66(.891)	(1.49, 1.82)
Agree	37	32.5		
Neither Agree nor Disagree	8	7.0		
Disagree	6	5.3		
Strongly Disagree	1	.9		

Participants were asked SQ 7, earning a college degree will enhance my personal and professional education. Eighty-three (72.8%) participants selected Strongly Agree, 27 (23.7%) participants selected Agree, three (2.6%) participants selected Neither Agree nor Disagree, one (.9%) participant selected Disagree; there was no (0%) selection for Strongly Disagree. The mean score for SQ 7 was 1.32. The standard deviation was .569. The 95% confidence interval was 1.21 to 1.42. The mean and confidence interval suggested that the participants strongly agreed with this being a motivating factor. See Table 12.

Table 12

Enhance My Personal and Professional Education

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	83	72.8	1.32 (.569)	(1.21, 1.42)
Agree	27	23.7		
Neither Agree nor Disagree	3	2.6		
Disagree	1	.9		
Strongly Disagree	0	0		

Participants were asked SQ 8, earning a college degree will assist me in attaining a job or career promotion. Seventy-five (65.8%) participants selected Strongly Agree, 26 (22.8%) participants selected Agree, 10 (8.8%) participants selected Neither Agree nor Disagree, two (1.8%) participants selected Disagree, and one (.9%) participant selected Strongly Disagree. The

mean score for SQ 8 was 1.49. The standard deviation was .801. The 95% confidence interval was 1.34 to 1.64. The mean and confidence interval suggested that the participants strongly agreed with this being a motivating factor. See Table 13.

Table 13

Assist Me in Attaining a Job or Career Promotion

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	75	65.8	1.49 (.801)	(1.34, 1.64)
Agree	26	22.8		
Neither Agree nor Disagree	10	8.8		
Disagree	2	1.8		
Strongly Disagree	1	.9		

Participants were asked SQ 9, earning a college degree will allow me to be a mentor for others. Twenty-eight (24.6%) participants selected Strongly Agree, 44 (38.6%) participants selected Agree, 31 (27.2%) participants selected Neither Agree nor Disagree, seven (6.1%) participants selected Disagree, and four (3.5%) participants selected Strongly Disagree. The mean score for SQ 9 was 2.25. The standard deviation was 1.012. The 95% confidence interval was 2.07 to 2.44. The mean and confidence interval suggested that the participants agreed with this being a motivating factor. See Table 14.

Table 14

Allow Me to be a Mentor for Others

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	28	24.6		
Agree	44	38.6	2.25 (1.012)	(2.07, 2.44)
Neither Agree nor Disagree	31	27.2		
Disagree	7	6.1		
Strongly Disagree	4	3.5		

Participants were asked SQ 10, earning a college degree will allow me to demonstrate commitment (to self, family, or career). Fifty-four (47.4%) participants selected Strongly Agree, 32 (28.1%) participants selected Agree, 20 (17.5%) participants selected Neither Agree nor Disagree, six (5.3%) participants selected Disagree, and two (1.8%) participants selected Strongly Disagree. The mean score for SQ 10 was 1.86. The standard deviation was 1.003. The 95% confidence interval was 1.67 to 2.05. The mean and confidence interval suggested that the participants strongly agreed with this being a motivating factor. See Table 15.

Table 15

Allow Me to Demonstrate Committment (to self, family, or career)

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	54	47.4	1.86 (1.003)	(1.67, 2.05)
Agree	32	28.1		
Neither Agree nor Disagree	20	17.5		
Disagree	6	5.3		
Strongly Disagree	2	1.8		

To obtain the answer to RQ2, What factors enabled military service members to earn a post-secondary degree?, the researcher identified enable as the factor with there being eight independent variables, supported by literature, that influenced that factor. The eight independent variables were used in an experimental manner as a means to estimate the extent to which they could cause change to the factor enable (Patten, 2012). Earning a post-secondary degree was the dependent variable. The eight independent variables for service member enablers were the following:

1. The type of college or university a service member attends.

2. The Tuition Assistance program offered by the branch of service.

3. The use of Veterans Affairs benefits.

4. State academic support for service members.

5. The ability of the college or university a service member attends to offer tutoring services.

6. The ability of the college or university a service member attends to offer advising and counseling services.

7. The education center at the military installation where the service member is assigned.

8. Membership in professional associations, organizations, and networks that a service member may join.

Descriptive statistics from the responses to the questions pertaining to enabler which consisted of the mean within the responses and standard deviation were calculated to present comparative data. See Table 16 for the research and analysis concept for the subscale enabling factors.

Descriptive statistics from the responses to the questions pertaining to enabler which consisted of the mean within the responses and standard deviation were calculated to present comparative data. The subscale factors used to attain data for enabler were institutions of higher education, assistance and support programs, services, and professional associations and networks; these were linked to specific questions within the survey. An open-ended question allowed participants to provide additional enabling factors that were not included within the survey. See Table 16 for the subscale factors and survey questions synchronization for enabler.

Table 16

Subscale Factors and Survey Questions Synchronization for Enabler

Factor	Survey Question	Analysis
Institutions of Higher Education (IHE)	12	Descriptive Statistics to determine frequency, mean, and standard deviation.
		One-Sample T Test to determine 95% confidence interval
		Multiple regression analysis to determine significance
Assistance & Support Programs	13-15	Same concept as IHE
Services	16-18	Same concept as IHE
Professional Associations & Networks	19	Same concept as IHE
Open form question to attain additional enabling factors	20	Individual analysis to determine and record recurring themes

Participants were asked SQ 12, an enabler is the type of college or university (traditional, two-year or community college, online institution) a service member attends. Twenty-six (22.8%) participants selected Strongly Agree, 49 (43%) participants selected Agree, 30 (26.3%) participants selected Neither Agree nor Disagree, seven (6.1%) participants selected Disagree, and one (.9%) participant selected Strongly Disagree. One (.9%) participant failed to answer SQ 12. The mean score for SQ 12 was 2.19. The standard deviation was .892. The 95% confidence interval was 2.02 to 2.35. The mean and confidence interval suggested that the participants agreed with this being an enabling factor. See Table 17.

Table 17

The Type of College or University a Service Member Attends

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	26	22.8		
Agree	49	43.0	2.19 (.892)	(2.02, 2.35)
Neither Agree nor Disagree	30	26.3		
Disagree	7	6.1		
Strongly Disagree	1	.9		
Failed to Answer	1	.9		

Participants were asked SQ 13, an enabler is the Tuition Assistance (TA) program offered by the branch of service. Fifty-one (44.7%) participants selected Strongly Agree, 35 (30.7%) participants selected Agree, 16 (14%) participants selected Neither Agree nor Disagree, eight (7%) participants selected Disagree, and three (2.6%) participants selected Strongly Disagree. One (.9%) participant failed to answer SQ 13. The mean score for SQ 13 was 1.91. The standard deviation was 1.057. The 95% confidence interval was 1.71 to 2.11. The mean and confidence interval suggested that the participants strongly agreed with this being an enabling factor. See Table 18.

Table 18

The Tuition Assistance Program Offered by the Branch of Service

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	51	44.7	1.91 (1.057)	(1.71, 2.11)
Agree	35	30.7		
Neither Agree nor Disagree	16	14.0		
Disagree	8	7.0		
Strongly Disagree	3	2.6		
Failed to Answer	1	.9		

Participants were asked SQ 14, an enabler is the use of Veterans Affairs (VA) benefits. Seventy-nine (69.3%) participants selected Strongly Agree, 23 (20.2%) participants selected Agree, nine (7.9%) participants selected Neither Agree nor Disagree, one (.9%) participant selected Disagree, and one (.9%) participant selected Strongly Disagree. One (.9%) participant failed to answer SQ 14. The mean score for SQ 14 was 1.42. The standard deviation was .754. The 95% confidence interval was 1.28 to 1.57. The mean and confidence interval suggested that the participants strongly agreed with this being an enabling factor. See Table 19.

Table 19

The Use of Veteran Affairs Benefits

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	79	69.3	1.42 (.754)	(1.28, 1.57)
Agree	23	20.2		
Neither Agree nor Disagree	9	7.9		
Disagree	1	.9		
Strongly Disagree	1	.9		
Failed to Answer	1	.9		

Participants were asked SQ 15, an enabler is state academic support for service members (e.g., Virginia, Texas, North Carolina, etc.). Thirty-six (31.6%) participants selected Strongly Agree, 38 (33.3%) participants selected Agree, 31 (27.2%) participants selected Neither Agree nor Disagree, four (3.5%) participants selected Disagree, and three (2.6%) participants selected Strongly Disagree. Two (1.8%) participants failed to answer SQ 15. The mean score for SQ 15 was 2.11. The standard deviation was .990. The 95% confidence interval was 1.92 to 2.29. The mean and confidence interval suggested that the participants agreed with this being an enabling factor. See Table 20.

Table 20

State Academic Support for Service Members

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	36	31.6		
Agree	38	33.3	2.11 (.990)	(1.92, 2.29)
Neither Agree nor Disagree	31	27.2		
Disagree	4	3.5		
Strongly Disagree	3	2.6		
Failed to Answer	2	1.8		

Participants were asked SQ 16, an enabler is the ability of the college or university a service member attends to offer tutoring services. Thirty-three (28.9%) participants selected Strongly Agree, 32 (28.1%) participants selected Agree, 35 (30.7%) participants selected Neither Agree nor Disagree, 11 (9.6%) participants selected Disagree, and one (.9%) participant selected Strongly Disagree. Two (1.8%) participants failed to answer SQ 16. The mean score for SQ 16 was 2.24. The standard deviation was 1.016. The 95% confidence interval was 2.05 to 2.43. The mean and confidence interval suggested that the participants agreed with this being an enabling factor. See Table 21.

Table 21

The Ability of the College or University a Service Member Attends to Offer Tutoring Services

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	33	28.9		
Agree	33	28.1	2.24 (1.016)	(2.05, 2.43)
Neither Agree nor Disagree	35	30.7		
Disagree	11	9.6		
Strongly Disagree	1	.9		
Failed to Answer	2	1.8		

Participants were asked SQ 17, an enabler is the ability of the college or university a service member attends to offer advising and counseling services. Thirty-five (30.7%) participants selected Strongly Agree, 50 (43.9%) participants selected Agree, 20 (17.5%) participants selected Neither Agree nor Disagree, five (4.4%) participants selected Disagree, and two (1.8%) participants selected Strongly Disagree. Two (1.8%) participants failed to answer SQ 17. The mean score for SQ 17 was 2.01. The standard deviation was .915. The 95% confidence interval was 1.84 to 2.18. The mean and confidence interval suggested that the participants agreed with this being an enabling factor. See Table 22.

Table 22

The Ability of the College or University a Service Member Attends to Offer Advising and Counseling Services

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	35	30.7		
Agree	50	43.9	2.01 (.915)	(1.84, 2.18)
Neither Agree nor Disagree	20	17.5		
Disagree	9	4.4		
Strongly Disagree	2	1.8		
Failed to Answer	2	1.8		

Participants were asked SQ 18, an enabler is the education center at the military installation where the service member is assigned. Thirty-two (28.1%) participants selected Strongly Agree, 32 (28.1%) participants selected Agree, 34 (29.8%) participants selected Neither Agree nor Disagree, 12 (10.5%) participants selected Disagree, and three (2.6%) participants selected Strongly Disagree. One (.9%) participant failed to answer SQ 18. The mean score for SQ 18 was 2.31. The standard deviation was 1.078. The 95% confidence interval was 2.11 to 2.51. The mean and confidence interval suggested that the participants neither agreed nor disagreed with this being an enabling factor. See Table 23.

Table 23

The Education Center at the Military Installation Where the Service Member is Assigned

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	32	28.1		
Agree	32	28.1		
Neither Agree nor Disagree	34	29.8	2.31 (1.078)	(2.11, 2.51)
Disagree	12	10.5		
Strongly Disagree	3	2.6		
Failed to Answer	1	.9		

Participants were asked SQ 19, an enabler is membership in professional associations, organizations, and networks that a service member may join. Twenty-four (21.1%) participants selected Strongly Agree, 35 (30.7%) participants selected Agree, 42 (36.8%) participants selected Neither Agree nor Disagree, 10 (8.8%) participants selected Disagree, and two (1.8%) participants selected Strongly Disagree. One (.9%) participant failed to answer SQ 19. The mean score for SQ 19 was 2.39. The standard deviation was .977. The 95% confidence interval was 2.21 to 2.57. The mean and confidence interval suggested that the participants neither agreed nor disagreed with this being an enabling factor. See Table 24.

Table 24

Memberships in Professional Associations, Organizations, and Networks a Service Member May Join

Scale	n	%	M (SD)	95% (CI)
Strongly Agree	24	21.1		
Agree	35	30.7		
Neither Agree nor Disagree	42	36.8	2.39 (.977)	(2.21, 2.57)
Disagree	10	8.8		
Strongly Disagree	2	1.8		
Failed to Answer	1	.9		

Measures of the Independent Variables

Survey question 21 pertained to participants' outlook regarding their personal levels of

motivation for earning their college degree. Participants were asked SQ 21, How would you rate

your overall level of motivation for earning your college degree?.   Seventy-seven (67.5%)

participants selected Strongly Motivated, 34 (29.8%) participants selected Motivated, 2 (1.8%)

participants selected Unmotivated; there were no (0%) selections for Neither Motivated nor

Unmotivated and for Strongly Unmotivated. One (.9%) participant failed to answer SQ 21. The

mean score for SQ 21 was 1.35. The standard deviation was .581. The 95% confidence interval

was 1.25 to 1.46. The mean and confidence interval suggested that the participants had a

strongly motivated overall outlook regarding their personal levels of motivation for earning their

college degrees. See Table 25.

Table 25

Level of Motivation for Earning Your Degree

Scale	n	%	M (SD)	95% (CI)
Strongly Motivated	77	67.5	1.35 (.581)	(1.25, 1.46)
Motivated	34	29.8		
Neither Motivated nor Unmotivated	0	0		
Unmotivated	2	1.8		
Strongly Unmotivated	0	0		
Failed to Answer	1	.9		

Survey question 22 pertained to participants' outlook regarding their personal level of

satisfaction of the enablers that were made available to assist them in earning their college

degree. Participants were asked SQ 22, How satisfied were you with the enablers made available

for you during your time in the military?. Twenty-two (19.3%) participants selected Strongly

Satisfied, 33 (28.9%) participants selected Satisfied, 25 (21.9%) participants selected Neither

Satisfied nor Dissatisfied, 27 (23.7%) participants selected Dissatisfied, six (5.3%) participants

selected Strongly Dissatisfied. One (.9%) participant failed to answer SQ 22. The mean score

for SQ 22 was 2.66. The standard deviation was 1.192. The 95% confidence interval was 2.44

to 2.89. The mean and confidence interval suggested that the participants were overall satisfied

regarding the enablers that had been made available to assist them in earning their college

degrees. See Table 26.

Table 26

Level of Satisfaction for the Enablers Made Available to Assist in Earning Your Degree

Scale	n	%	M (SD)	95% (CI)
Strongly Satisfied	22	19.3		
Satisfied	33	28.9	2.66 (1.192)	(2.44, 2.89)
Neither Satisfied nor Dissatisfied	25	21.9		
Dissatisfied	27	23.7		
Strongly Dissatisfied	6	5.3		
Failed to Answer	1	.9		

Questions Regarding Demographics

Demographic information to include rank, gender, number of semester (or quarters) taken

in pursuit of attaining a post-secondary degree, age, and highest attained education level was

collected. Participants were asked SQ 23, please identify your rank category at the time of your

discharge. There were three categories available from which the participants could select; they

were enlisted, warrant officer, and officer. One hundred seven (93.9%) participants selected

enlisted, and six (5.3%) participants selected officer. There were no (0%) selections for warrant

officer. One (.9%) participant failed to answer SQ23.

Participants were asked SQ 24; please identify your gender. Sixty-three (55.3%)

participants selected male and 50 (43.9%) participants selected female. One (.9%) participant

failed to answer SQ 24.

Participants were asked SQ 25, how many semesters (or quarters) of college or university course work have you completed?. Two (1.8%) participants selected zero, 10 (8.8%) participants selected one to two, 11 (9.6%) participants selected three to four, 37 (32.5%) participants selected five to six, 11 (9.6%) participants selected seven to eight, and 42 (36.8%) participants selected nine or more. One (.9%) participant failed to answer SQ 25. The mean score for SQ 25 was 4.51. The standard deviation was 1.396. The 95% confidence interval was 4.25 to 4.77. The mean and confidence interval suggested that the participants had completed nine or more semesters (or quarters) of college or university course work. See Table 27.

Table 27

Semesters (or quarters) of College or University Course Work Completed

Scale	n	%	M(SD)	95% (CI)
0	2	19.3		
1-2	10	8.8		
3-4	11	9.6		
5-6	37	32.5		
7-8	11	9.6	4.51 (1.396)	(4.25, 4.77)
9 or more	42	36.8		
Failed to answer	1	.9		

Participants were asked SQ 26, what is your age range?. Six (5.3%) participants selected the 20-24 range, 27 (23.7%) participants selected the 25-29 range, 29 (25.4%) participants selected the 30-34 range, 19 (16.7%) participants selected the 35-39 range, 10 (8.8%) participants selected the 40-44 range, and 22 (19.3%) participants selected the 45 and higher range. One (.9%) participant failed to answer SQ 26. The mean score for SQ 26 was 3.58. The standard deviation was 1.551. The 95% confidence interval was 3.29 to 3.87. The mean and confidence interval suggested that the participants were in the 30-34 age range. See Table 28.

Table 28

Age Range

Scale	n	%	M(SD)	95% (CI)
20-24	6	5.3		
25-29	27	23.7		
30-34	29	25.4	3.58 (1.551)	(3.29, 3.87)
35-39	19	16.7		
40-44	10	8.8		
45 & higher	22	19.3		
Failed to answer	1	.9		

Participants were asked SQ 27, what is your highest education level attained? Twenty-six (22.8%) participants selected high school, five (4.4%) participants selected certificate, 47 (41.2%) participants selected associate, 18 (15.8%) participants selected bachelor, and 17 (14.9%) participants selected graduate. One (.9%) participant failed to answer SQ 27. The mean score for SQ 27 was 2.96. The standard deviation was 1.319. The 95% confidence interval was 2.71 to 3.20. The mean and confidence interval suggested that the associate was the participants' highest education level attained. See Table 29.

Table 29

Highest Education Level Attained

Scale	n	%	M(SD)	95% (CI)
High School	26	22.8		
Certificate	5	4.4		
Associate	47	41.2	2.96 (1.319)	(2.71, 3.20)
Bachelor	18	15.8		
Graduate	17	14.9		
Failed to Answer	1	.9		

Analysis of the Independent Variables

The researcher conducted additional analysis to determine if used in an experimental manner, the means of the extent to which the 10 independent variables could cause change to the factor motivation (Patten, 2012). The researcher used a multiple regression method to determine the outcome of the factor when measured against the independent variables. The overall results and the individual result of each variable were reported.

A multiple regression was calculated to determine the significance of motivation when measured against the 10 independent variables. A regression model assisted in predicting the significance of motivation, $R = .542$, $R^2 = .293$, $F_{(10, 102)} = 4.232$, $p < .001$. Using a 95% confidence interval or a minimum significance level of $p < .05$, each independent variable was measured against the factor, motivation. The results were reported. See Table 30.

Observing a minimum significance level of $p < .05$, one independent variable, assist me in achieving personal growth, was significant.

The researcher conducted additional analysis to determine if used in an experimental manner, the means of the extent to which the eight independent variables could cause change to the factor enabler (Patten, 2012). The researcher used a multiple regression method to determine the outcome of the factor when measured against the independent variables. The overall results and the individual result of each variable were reported.

A multiple regression was calculated to determine the significance of enablers when measured against the eight independent variables. A regression model was not significant in predicting the enablers, $R = .276$, $R2 = .076$, $F(8, 102) = 1.054$, $p = .401$. Using a 95%

confidence interval or a minimum significance level of p < .05, each independent variable was

measured against the factor, enabler. The results were reported. See Table 31.

Table 30

Independent Variables Measured Against Motivation

Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Aid me in attaining satisfaction	-.057	.108	-.061	-.523	.602
Assist me in achieving personal growth	.402	.125	.424	3.210	.002
Assist me in forming a professional identity	.056	.072	.082	.777	.439
Assist me in expanding my knowledge base	.012	.120	.011	.096	.923
Assist me in establishing resilience	.058	.057	.106	1.019	.311
Fulfill the goals of my professional development	-.014	.076	-.021	-.183	.855
Enhance my personal and professional education	.102	.120	.101	.851	.397
Assist me in attaining a job or career promotion	.041	.075	.057	.546	.586
Allow me to be a mentor for others	.027	.059	.046	.455	.650
Allow me to demonstrate commitment (to self, family, or career)	-.043	.063	-.074	-.685	.495

Table 31

Independent Variables Measured Against Enablers

Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
The type of college or university a service member attends	.012	.155	.009	.079	.937
The Tuition Assistance program offered by the branch of service	.013	.144	.011	.089	.929
The use of Veterans Affairs benefits	.137	.174	.087	.786	.434
State academic support for service members	.048	.147	.040	.329	.743
The ability of the college or university a service member attends to offer tutoring services	-.073	.174	-.063	-.421	.674
The ability of the college or university a service member attends to offer advising and counseling services	.025	.181	.019	.136	.892
The education center at the military installation where the service member is assigned	.137	.137	.124	1.000	.320
Membership in professional associations, organizations, and networks that a service member may join	.182	.140	.149	1.300	.197

Observing a minimum significance level of $p < .05$, there were no significant independent variables for enabler. The Beta could be used determine which variable made the largest contribution (Stadtlander, 2015). Although insignificant, membership in professional associations, organizations, and networks that a service member may join (Beta = .149) would be the enabler that contributed the most to service member post-secondary degree completion

Analysis by Gender

Results from data collected indicated that 63 (55.3%) males and 50 (43.9%) females completed SQ 24, Please identify your gender. The researcher conducted a *t*-test by gender to determine if there were any differences in motivation by gender. The Levene's Test for Equality of Variances (Gamst, Meyers, & Guarino, 2008) did not suggest the violation of the homogeneity of variances by gender, $t(.879) = 3.311$, $p = .071$. The mean for males was 1.40 (SD = .661), and the mean for females was 1.30 (SD = .463). The researcher conducted a *t*-test by gender to determine if there were any differences in the enablers by gender. The Levene's Test for Equality of Variances (Gamst, Meyers, & Guarino, 2008) did not suggest the violation of the homogeneity of variances by gender, $t(-.445) = .001$, $p = .971$. The mean for males was 2.62 (SD = 1.21), and the mean for females was 2.72 (SD = 1.18).

Summary

This chapter presented the analysis of the data obtained from the sample of service members with the intent of answering RQ_1: What factors motivated military service members to earn a post-secondary degree?, and RQ_2: What factors enabled military service members to earn a post-secondary degree? There were 781 emails sent to service members inviting them to participate in the study; 141 (18%) responses were received which 114 (n=114) of the participants were eligible to provide data. Data were obtained from the service members who

provided responses by answering questions in the online Qualtrics survey; the survey consisted

of questions that pertained to the motivating and enabling factors for service members earning a

post-secondary degree.

Survey questions 1-10 concentrated on RQ_1: What factors motivated military service

members to earn a post-secondary degree? Descriptive statistics obtained from the survey

resulted in eight variables having means that ranged from 1.32 to 1.86; this suggested strong

agreement with these variables promoting motivation. See Table 32.

Table 32

Prominent Motivating Variables

Variables	M (SD)	95% CI
Aid me in attaining satisfaction	1.46 (.626)	(1.34, 1.57)
Assist me in achieving personal growth	1.36 (.612)	(1.25, 1.47)
Assist me in forming a professional identity	1.57 (.852)	(1.41, 1.73)
Assist me in expanding my knowledge base	1.32 (.540)	(1.22, 1.42)
Fulfill the goals of my professional development	1.66(.891)	(1.49, 1.82)
Enhance my personal and professional education	1.32 (.569)	(1.21, 1.42)
Assist me in attaining a job or career promotion	1.49 (.801)	(1.34, 1.64)
Allow me to demonstrate commitment (to self, family, or career)	1.86 (1.003)	(1.67, 2.05)

Survey question 11 was an open-form question: Briefly describe any other factors (not

previously mentioned) that you consider as motivating factors for earning a college degree?

Thirty-five participants provided written responses to the question. The most prevalent

responses were the following: assist in being an example to my children (family), assist in attaining financial security, and assist in changing a career path.

A regression model assisted in predicting the significance of motivation, $R = .542$, $R^2 = .293$, $F_{(10, 102)} = 4.232$, $p < .001$. Observing a minimum significance level of $p < .05$, one independent variable, assist me in achieving personal growth, was significant.

Survey questions 12-20 concentrated on RQ_2: What factors enabled military service members to earn a post-secondary degree? Descriptive statistics obtained from the survey resulted in two variables having means of 1.91 and 1.42 respectively; this suggested strong agreement with these variables promoting the enablers. See Table 33.

Table 33

Prominent Enabling Variables

Variables	M (SD)	95% CI
The tuition assistance program offered by the branch of service	1.91 (1.057)	(1.71, 2.11)
The use of Veteran Affairs benefits	1.42 (.754)	(1.28, 1.57)

Survey question 20 was an open-form question: Briefly describe any other factors (not previously mentioned) that you consider enabling factors for earning a college degree? Eighteen participants provided written responses to the question. The most prevalent responses were the following: family and social support to assist with childcare, the ability to have a community of veterans and mentors on campus, and the ability of the college or university to accept military-approved credits and experience as transfer credits.

A regression model was not significant in predicting the enablers, $R = .276$, $R^2 = .076$, $F_{(8, 102)} = 1.054$, $p = .401$. Observing a minimum significance level of $p < .05$, there no significant independent variables.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

This chapter highlighted main points of the study. A statement of the problem, research questions, limitations, and assumptions were summarized. The review of literature was recapitulated; the methodology, findings, and results followed. Conclusions were drawn on the research questions, and the outcomes were explained. This chapter concluded with recommendations for further research.

Summary

The purpose of this study was to investigate what motivated and enabled military service members to earn a post-secondary degree. This problem was investigated to better inform institutions of higher education how to recruit and retain military-affiliated members and how to provide career-enhancing information to service members at institutions of higher education. The two research questions that guided this study were (1) What factors motivated military service members to earn a post-secondary degree? and (2) What factors enabled military service members to earn a post-secondary degree?

The limitations of this study consisted of (1) data being collected from service members who were separated from the military and not serving in an active or reserve status in the U.S. Armed Forces; (2) data being collected from service members who could not be called to duty with the U.S. Armed Forces; (3) data being collected from service members who did not retire from the U.S. Armed Forces; (4) data being collected from a four-year institution of higher education in the coastal southeast Virginia area and from a two-year institution of higher education in the central Virginia; (5) data being collected from service members seeking two-

year, four-year, or graduate degrees or those who had earned post-secondary degrees; and (6) data collection not being restricted by the type of degree nor by the level of the degree sought.

Research was conducted based on the assumptions that (1) the institutions of higher education where the military service members were admitted were either two-year or four-year schools and provided associates, bachelors, or graduate degrees; (2) service members could distinguish between earning a certificate, a degree, or a credential; furthermore, they were enrolled in higher education to earn either an associate's, bachelor's, or graduate degree; (3) service members had the option of using their government-provided benefits to finance their education; and (4) the institutions of higher education and veteran education support networks were interested in obtaining the findings of this research. The researcher made further assumptions during the course of this study that upon completion, there would be additional opportunities to conduct higher education and DoD-approved research in areas similar to this study.

The researcher started the literature review by presenting the motivating factors that were inherent in service members seeking post-secondary degrees; the enablers were observed as being those critical entities that provided support to service members who were seeking to continue their education. Within this study, post-secondary degrees included an associate's, a bachelor's, a master's, or a doctoral degree earned from a college or university after one completed secondary education (Hofmann, et al., 2016). The literature enhanced the importance of service members attending institutions of higher education to attain post-secondary degrees; this greatly coincided with their individual levels of motivation. The enablers were seen as those resources that could have provided assistance to service members either while they were

deciding to start the work toward their degree or while they were in the process of attaining their degree.

There were various educational levels of service members within the Department of Defense's (DoD) service components (Army, Air Force, Navy, Marines); these levels existed among the enlisted, warrant officer, and officer ranks within the military (Brown, 2015). Listing warrant officer ranks and pay grades in the Air Force was excluded because they did not exist in that branch of service (Department of Defense, 2016). Various complexities, such as critical thinking skills and the ability to manage a large number of resources, were prominent among the officer ranks; a bachelor's degree was required for service members who wanted to become military officers (U.S. Army, 2015). Attaining a post-secondary degree provided service members the ability to increase their critical thinking and problem solving skills; increasing critical thinking skills was noted as a higher education goal (Ahrari, et al., 2016).

Service members gained exceptional knowledge as a result of attaining a post-secondary degree. These members already had exceptional military-related skills which they gained from service-specific training; however, post-secondary schooling increased their education levels (Vacchi, 2012). When deciding whether to seek post-secondary degrees, service members relied on their embedded persistence, collaborative skills, and self-discipline to assist them in making the decision to attend an institute of higher education. Once enrolled, post-secondary education enhanced service members' critical decision making abilities (Vacchi, 2012).

The military transformed in 1973 from where it drafted its service members to allowing them to volunteer (Bailey, 2007); thus, there was a rise in the education levels of service members as a result of them having the option of either joining the military or not. During the military's transformation process, the individual service member evolved to one who was more

educated and displayed more of a professional persona. As such, the military began to invest more resources into its education programs; this enabled the military to progress more as an establishment and to define itself as a more professional organization (Zacharakis & Van Der Werff, 2012).

There were several motivating factors that could have been present in service members seeking post-secondary degrees. Charles and Senter (1995) defined motivation as the desire or the reason for an individual to accomplish something. Within the motivation construct resided two types: extrinsic and intrinsic motivation. When individuals accomplished tasks to (1) earn a reward, (2) receive an appraisal, or (3) avoid unfavorable action, extrinsic motivation was prevalent. Individuals that performed acts because of them being personally rewarding were exhibiting intrinsic motivation characteristics (Lim & Kim, 2003).

The researcher identified satisfaction, career enhancement, and commitment as the subcomponents of motivation that influenced service member decisions to attain post-secondary degrees. Satisfaction was derived from a psychological foundation which pertained to the desire of achievement as the result of providing a service or product (Pizan & Ellis, 1999). Career enhancement was related to the many ways that requirements change and how personnel education and training were incorporated into organizations to facilitate the adjustments needed for individual growth and opportunities (Alexander & Goldberg, 2011). Commitment coincided with goal-directed behavior and a person being determined enough to achieve their goal (Hartog & Belschak, 2007).

Enablers facilitated service members earning post-secondary degrees. These enablers were the factors that either had an impact or influenced personnel development; they also,

assisted service members to attain their goals and contributed to their education (Christenson & Anderson (2002).

The researcher finalized the literature review by identifying enabler subcomponents that influenced service member decisions to attain post-secondary degrees at institutions of higher education. The subcomponents were assistance and support programs, services, and professional associations and networks. Institutions of higher education were those organizations that focused on instruction and learning (Ruhupatty & Maguad, 2015). Assistance and support programs were emplaced to provide assistance with books, equipment, fees, supplies, and tuition (Tran & Smith, 2017). Those programs that aided students in the areas of assessment, assistance, counseling, diagnostics, guidance, information, rehabilitation, referrals, and training were categorized as services (Cahit, et al., 2016). There were opportunities for students to align themselves with other professionals who had similar goals and ideas for career development (Cottrell, Girvan, & McKenzie, 2009); these were identified as professional associations and networks which were important for students' long-term relationships and were deemed as important entities within individual career development (Forbes, 2017).

The sampled population consisted of service members who were enrolled in post-secondary degree programs as military veterans. Department of Defense policies and regulations prohibited the researcher from recruiting service members who were affiliated with the military in an active or reserve status and those who had retired after 20 or more years to participate in this study. Moreover, these persons were deemed ineligible and could not contribute to the data-collection. The only service members the researcher could select were those who had no official affiliation with the armed services.

The researcher invited 781 service members to participate in the study; 463 service members were enrolled at a four-year institution of higher education in the coastal southeast Virginia area and 318 service members were enrolled at a two-year institution of higher education in central Virginia. These participants were selected because they were identified as persons who had been affiliated with the military, had a familiarization with the military culture, and were seeking post-secondary degrees. The institutions that the service members attended were selected because (1) they were in close proximity to the researcher and (2) the researcher had a professional connection with their military liaisons who could assist in identifying the intended participants.

A data-collection instrument consisting of 25 closed-form Likert-scale questions was used to obtain motivation and enabler data; as well, questions regarding demographics were obtained in this manner. There were two open-form questions to gather participant opinions regarding the factors which they, also, thought were of importance but not listed in the survey.

The survey questions pertaining to motivation were used to answer RQ_1 and were developed based on literature review from the following research: Alexander and Goldberg, 2011; Başaran, 2000; Brown, 1996; Chiocchio and Lafreniére, 2009; Hamidi, Mohammadibakhsh, Soltanian, and Behzadifar, 2017; Hartog and Belschak, 2007; Lee and Pang, 2014; Lowin, 2003; Meyer and Herscovitch, 2001; Perreira and Berta, 2016; Pizan and Ellis, 1999; Rand and Cheavens, 2009; Solinger, van Olffen, and Roe, 2008; Spector, 1996; and Yildirim, 2015. The independent variables pertaining to motivation identified from literature included the following:

1. Aid me in attaining satisfaction.

2. Assist me in achieving personal growth.

3. Assist me in forming a professional identity.

4. Assist me in expanding my knowledge base.

5. Assist me in establishing resilience.

6. Fulfill the goals of my professional development.

7. Enhance my personal and professional education.

8. Assist me in attaining a job or career promotion.

9. Allow me to be a mentor for others.

10. Allow me to demonstrate commitment (to self, family, or career).

The survey questions pertaining to enabler were used to answer RQ_2 and were developed based on literature review from the following research: Abdul-Amin, 2016; Agasisti and Johnes, 2015; Burnett and Segoria, 2009; Buryk, Trail, Gonzales, Miller, and Friedman, 2015; Capelli, 2004; Dougherty and Woodland, 2009; Ekman, 2013; Guitérrez-Romero, Haubrich, and McLean, 2008; Lerman, McKernan, and Reigg, 2004; McCready, 2010; Mentzer, Black, and Spohn, 2015; Miller, 2012; Ruhupatty and Maguad, 2015; Tran and Smith, 2017; and Zhou, Tijssen, and Leydesdorff, 2016. The independent variables pertaining to enabler identified from literature included the following:

1. The type of college or university a service member attends.

2. The Tuition Assistance program offered by the branch of service.

3. The use of Veterans Affairs benefits.

4. State academic support for service members.

5. The ability of the college or university a service member attends to offer tutoring services.

6. The ability of the college or university a service member attends to offer advising and counseling services.

7. The education center at the military installation where the service member is assigned.

8. Membership in professional associations, organizations, and networks that a service member may join.

Earning a post-secondary degree was identified as the dependent variable. The motivation and enabler independent variables facilitated the service members' decisions and actions toward earning their post-secondary degrees.

Six individuals with previous military experience were selected as survey reviewers. The individual reviewers were service members enrolled at a four-year institution of higher education and did not attend the same institution where the potential participants of the study attended; also, they were of similar demographics of the intended population. After input was received from the reviewers, they were released of their requirements which completed their participation with the study.

The center directors of the military-affiliated student assistance office employed at the institutions assisted the researcher with survey distribution. The directors provided enrollment numbers, verified email addresses, and emailed the survey to the service members enrolled at their respective institution. There were 781 emails sent to service members; 463 were sent at the

four-year institution, and 318 were sent at the two-year institution. Of the 141 responses received, 114 were eligible for use. The data collection limitations were used to eliminate 27 participants who ineligible to participate; this elimination was done to ensure that there would be no violation of DoD policies and regulations.

Descriptive statistics, to include number of responses, percentages, mean, standard deviation, and 95% confidence interval, was used to analyze the closed-form questions. The open-form questions were categorized based on frequencies of reoccurring themes and patterns. A multiple regression analysis was used to determine the RQ_1 What factors motivated service members to earn a post-secondary degree?, and RQ_2 What factors enabled service members to earn a post-secondary degree?.

Conclusions

Research pertaining to the motivating and enabling factors of service members earning their post-secondary degrees was conducted in this study. Findings led to discovering service members' motivating and enabling factors for earning their post-secondary degrees. The data was used to answer the research questions.

Research Question 1 was "What factors motivated military s service members to earn a post-secondary degree?" Data obtained from descriptive statistics indicated that participants Strongly Agreed that the following were factors that motivated them toward earning their post-secondary degrees: aid me in attaining satisfaction (M = 1.46), assist me in achieving personal growth (M = 1.36), assist me in forming a professional identity (M = 1.57), assist me in expanding my knowledge base (M = 1.32), fulfill the goals of my professional development (M = 1.66), enhance my personal and professional education (M = 1.32), assist me in attaining a job or career promotion (M = 1.49), and allow me to demonstrate commitment (to self, family, or

career) (M = 1.86). The manner which the participants strongly agreed to these factors indicated they viewed earning a post-secondary degree as either being extrinsically or intrinsically motivating; this was supported by literature which pertained to motivational outcome as either being results-oriented or personally rewarding (Lim & Kim, 2003).   The two remaining factors which participants Agreed motivated them in earning a post-secondary degree were as follows: assist me in establishing resilience (M = 2.28) and allow me to be a mentor for others (M = 2.25).

A multiple regression analysis was conducted to identify those significant motivating factors that led to post-secondary degree completion for service members. The regression model assisted in predicting the significance of motivation, $R = .542$, $R^2 = .293$, $F_{(10, 102)} = 4.232$, $p < .001$. Observing a minimum significance level of $p < .05$, one independent variable, assist me in achieving personal growth, was significant. These findings aligned with other motivational factors as described by Artino (2007) who indicated students' motivational beliefs coincided with positive academic outcomes. In this study, the positive academic outcome was earning a post-secondary degree.

Participants were requested, although not required, to answer the following open-ended question: "Briefly describe any other factors (not previously mentioned) that you consider as motivating factors for earning a college degree?" There were 35 written responses; the most reoccurring themes were the following: (1) assist in being an example to my children (family), (2) assist in attaining financial security, and (3) assist in changing a career path. In previous studies, Phinney, Dennis, and Osorio (2006) found that assisting one's family, proving individual self-worth, and the encouragement one received critically assisted individuals attend college.

Barabasch, Merrill, and Zanazzi (2015) stated that education was linked to one making a career change which supported individuals who engaged in lifelong learning.

Research Question 2 was "What factors enabled military service members to earn a post-secondary degree?" Data obtained from descriptive statistics indicated that participants Strongly Agreed that the following were factors that enabled them toward earning their post-secondary degrees: the tuition assistance program offered by the branch of service (M = 1.91) and the use of Veteran Affairs benefits (M = 1.42). These responses which the participants strongly agreed directly aligned with literature pertaining to DoD programs that were initiated to assist service members either start, continue, or complete their post-secondary education (McGovern, 2012). Participants Agreed that the following factors enabled them in earning a post-secondary degree: the type of college or university a service member attends (M = 2.19), state academic support for service members (M = 2.11), the ability of the college or university a service member attends to offer tutoring services (M = 2.24), and the ability of the college or university a service member attends to offer advising and counseling services (2.01). Participants neither agreed nor disagreed that the education center at the military installation where the service member is assigned (M = 2.31) and membership in professional associations, organizations, and networks that a service member may join (M = 2.39) enabled service members to attain their post-secondary degrees.

A multiple regression analysis was conducted to identify those significant enabling factors that led to post-secondary degree completion for service members. The regression model was not significant in predicting the enablers, $R = .276$, $R^2 = .076$, $F_{(8, 102)} = 1.054$, $p = .401$. Observing a minimum significance level of p < .05, there no significant independent variables. These findings were contradictory to the studies of Lokken, Pfeffer, McAuley, and Strong (2009)

and Wilson, Smith, Lee, and Stevenson (2013); these authors argued that service member support from local, state, and federal governing bodies and support from institutions of higher education where service members were enrolled was influential to military-affiliated students seeking post-secondary degrees.

Participants were given the option of answering an open-ended question which was "Briefly describe any other factors (not previously mentioned) that you consider as enabling factors for earning a college degree?" Written responses were received from 18 participants with the prominent responses being the following: (1) family and social support to assist with childcare, (2) the ability to have a community of veterans and mentors on campus, and (3) the ability of the college or university to accept military-approved credits and experience as transfer credits. Rumann, Rivera, and Hernandez, (2011) supported the need for institutions of higher education taking deliberate measures through policies, programs, strategies, and services to assist service members earn their degrees. College and university initiatives could include childcare services during class hours, training faculty and staff personnel on topics that enable them to better understand service member issues, establishing peer mentoring among service members, and launching student veteran organizations. Hitt, Sternberg, MacDermid-Wadsworth, Vaughan, Carlson, Dansie, and Mohrbacher (2015) highlighted that during their research, interviews with a number of the higher education administrators revealed that their colleges or universities had policies in place that supported awarding academic credits to service members for their military experience.

Recommendations

Several recommendations were made based on the findings of this study. Institutions of higher education, the DoD, and state and local governments can implement the recommendations

highlighted as new initiatives or updates to current practices. These recommendations have the potential to assist colleges and universities recruit service members and can be used as methods to retain them within higher education.

It is recommended that colleges and universities review their admissions processes to ensure the best practices are place that allow accountability of service members that enroll at their institutions. Institutions of higher education use various methods of capturing admissions data. Some colleges and universities instruct potential students to complete a hard copy admissions application which they either mail or personally deliver to the institution while institutions use electronic means of gathering admissions data. In either instance however, questions that verify whether an applicant has military-affiliated are still missing from many college and university admissions applications. In order to identify if applying individuals have a military connection, colleges and universities must ensure their admissions applications include statements or questions that validate military-affiliation. This process would assist institutions in identifying their service members. Adopting this method would be the initial step many colleges and universities would be required to conduct if they have the intention of assisting their service members with earning their degrees.

It is recommended that accrediting agencies evaluate whether current guidelines should request institutions of higher education collect service member progression data. Currently, colleges and universities report student progression and graduation data to their accrediting bodies and in many cases, to their state agencies that govern higher education. Many agencies that capture this data also collect military-affiliated student information. The service member-specific data that is currently collected assists higher level authorities in determining the number of students that use military-related benefits and any other enablers for higher education. In

many cases, the institutions that do not report service member data, have no systematic processes in place to assist in capturing information pertaining to that population. As a caveat to the previous recommendation that colleges and universities collect military-affiliated admissions data, a process to collect service member progression data should also be implemented by those institution that do not currently do so. Collecting service member data should be used as a means to form a statistical baseline of the number of service members that enter the institution each semester (quarter) and serve as a follow-on method of tracking their progress. As well, there are several organizations that use this data to assist them in ranking institutions against other colleges and universities and for providing ratings on how well those schools do in regards to serving service members. Embedding a service member-specific data collection process would enable higher education institutions to conduct analytics, report progress, and calculate graduation rates. As well, this implementation would provide higher education administrators the capability of identifying service member issues pertaining to degree completion well advance where solutions could be employed in a timely manner; this could minimize the impact on service members completing their degrees.

It is recommended that the DoD commission a research panel to conduct inquiries on the number of enlisted service members that have post secondary degrees. It was observed during the this study that there is a lack of information pertaining to the number of active and reserve service members that have post-secondary degrees. Literature on retention efforts for service members and information on military students is basically nonexistent (Boston, Ice, Gibson, 2011). Data collected in this proposed research would assist in determining if DoD would need to implement a strategic initiative to increase the number of enlisted service members with post-secondary degrees. The data would also assist in determining how service member efforts for

attaining post-secondary degrees could be enhanced. Literature obtained for this study, also, indicated that it was a requirement for officers to have a post-secondary degree therefore, gathering data on officers should not be the focus. However, with there being no requirement for enlisted service members or warrant officers (there are no warrant officers in the Air Force) to have a post-secondary degree, the emphasis should be placed on those populations. The DoD is making advancements by placing an increased emphasis on service members having the ability to think critically (Allen & Gerras, 2009); this is a major transformation within the military profession. To expedite this transformation, assisting enlisted service members attain their post-secondary degrees would be a major effort in empowering them in becoming critical thinkers. An increased number of enlisted service members as critical thinkers would be an overall benefit to the DoD and would provide an increased number of individuals with the opportunity of enhancing their education.

It is recommended that state governing bodies that oversee institutions of higher education place an increased emphasis on assisting service members within their jurisdictions complete their post-secondary degrees. Many states have taken the initiative to assist service members attain post-secondary degrees by developing policies and regulations that enable degree completion. Several states, also, allow service members who reside within their municipalities for military duty to become state residents; this enables the service member to have the ability to take advantage of state-specific degree completion policies and programs earmarked for them. The state of Virginia, for example, has established a military-focused advisory council that have the specific responsibility of recommending and reviewing policies that support service members earning post-secondary degrees (State Council of Higher Education for Virginia, 2016). It is

critical that the individual states across the U.S., especially those that have military installations within their territories, impose legislation that supports degree completion for service members.

It is recommended that institutions of higher education upgrade the manner which students gain access to information; this is critical if those institutions want to attract and maintain service members. Institutional upgrades should specifically be those that pertain to technology which include web-based infrastructure advancements. Service members have demanding professions which in many cases, make it cumbersome for them take higher education courses. When service members have to go onto the campus of their "brick and mortar" institutions for academic purposes, this affects their levels of motivation towards earning their post-secondary degrees. Traveling to campus include those manners where service members have to conduct personal business with institutional staff personnel. Examples of on-campus interactions include the following: applying for admission, registering for courses, and paying tuition. Service members seek to attend colleges and universities that provide alternative methods of conducting business from remote locations. This provides convenience which is a desirable service member enabler. Service members are also attracted to colleges and universities that allow them to continue their studies while they are stationed away from campus either in the continental U.S. or locations worldwide (Boston, Ice, & Gibson, 2011). Service members admire having the option of conducting their studies using a distance education medium if they desire. This gives service members the flexibility of knowing they have the choice of going to campus to attend classes or accomplishing their studies in an asynchronous or synchronous online environment. Institutions of higher education that invest in technological upgrades have better chances of attracting and retaining service members. These advances

demonstrate the institutions' efforts to provide enablers which assist in increasing service members' motivation for earning their post-secondary degrees.

It is recommended that follow-on research be conducted on the educationally preparedness of service members entering the civilian workforce upon military separation. Findings from this study indicated that service members were motivated to earn post-secondary degrees to assist in changing a career path. Service members transition into and out of the military on a continuous basis; they are either (1) entering the military as an enlisted person or a commissioned officer, (2) separating from the military as a discharged service member or, (3) transitioning out of the military through the retirement process (Feickert, 2014). Many service members that leave the military start follow-on careers in the civilian sector. The civilian workforce industry understands the value of hiring veterans and has placed greater emphasis in attaining discharged service members for their organizations (Deutch, 2017). However, many service members realize soon after they depart the military they either do not have the credentials or education needed for the type of civilian employment they desire. Once becoming aware they lack the credentials and education for employment, many service members begin to seek various options to obtain the additional education needed to secure higher paying employment; in many cases, they select fast-paced education curriculums which may not always yield the best results. Further studies are needed in the areas pertaining to service members' post-military careers. This information would assist service members in becoming better prepared prior to departing from the military; this information could enable them with the knowledge needed to attain the education required to gain civilian employment. Additional studies in this area would, also, benefit institutions of higher education to determine the best courses to provide transitioning service members and veteran organizations that assist discharged veterans find employment.

Having this education-related data would possibly assist service members with planning; this would enable them to attain post-secondary degrees in sufficient amounts of time prior to departing from the military.

It is recommended that there be follow-on studies conducted on the processes that institutions of higher education use to accept military-approved credits and work experiences as higher education transfer credits for service members; this could be a partnering initiative with the American Council for Education. Results from this study indicated that many institutions of higher education do not have procedures in place to either (1) conduct prior learning assessments, (2) translate military-related education and training experience to college credit, or (3) accept college credits from the former colleges or universities service members previously attended. Established policies, programs, strategies, and services to assist service members in transferring their previously-earned credits to their current institutions was a service member enabler identified in this study (Rumann, Rivera, & Hernandez, 2011). Organizations, such as Servicemembers Opportunity Colleges (SOC), were established to form a collaborative effort between DoD and institutions of higher education; one of the major responsibilities for SOC is to ensure service members receive the maximum amount of academic credit for their military education, training, and experience (Servicemembers Opportunities College, 2015). Many colleges and universities have instituted credit transfer policies to assist service members however, there still remain a number of institutions that have not. Research surrounding this issue could be a determining factor that could lead to reducing the time required of service members to earn their post-secondary degrees.

In conclusion, this study pertained to the motivating and enabling factors for service members earning a post-secondary degree. The findings from this research can be used to assist

colleges and universities recruit and retain service members and other military-affiliated students seeking post-secondary degrees at their institutions. Administrators, faculty, and staff in the higher education profession may, also, refer to this study as a professional development guide that educates them on how to identify service member motivators and enablers and how to employ interacting measures to assist service members pursue their education. Service members can benefit from the information in this study and use it as a reference to assist them in their current or future career plans. Military leaders should also refer to this study when providing counsel to their subordinate service members. This intended use of study is a compendium that adds to the body of knowledge on military education for service members.

References

Abdul-Amin, J. (2016). How HBCUs stack up. *Journal of College Admission, 233*, 32-35.

Abel, J., & Deitz, R. (2014). Do the benefits of college still outweigh the costs*? Current Issues in Economics and Finance, 20*(3), 1-9.

Academic Institutions for Military Students. (2015). The AIMS Network. Retrieved from http://academics.utep.edu/Default.aspx?alias=academics.utep.edu/aims

Agasisti, T., & Johnes, G. (2015). Efficiency, costs, rankings and heterogeneity: The case of US higher education. *Studies in Higher Education, 40*(1), 60-82.

Ahrari, S., Samah, B., Hassan, M., Wahat, N., & Zaremohzzabieh, Z. (2016). Deepening critical thinking skills through civic engagement in Malaysian higher education. *Thinking Skills & Creativity, 22,* 121-128. doi: 10.1016/j.tsc.2016.09.009

Albright, D., Fletcher, K., Pelts, M., & Taliaferro, L. (2017). Use of college mental health services among student veterans. *Best Practice in Mental Health, 13*(1), 65-79.

Alexander, C., & Goldberg, M. (2011). Lifelong learning through labor/management cooperation: Building the workforce of the future. *Adult Learning, 22*(1), 6-11.

Allen, C. & Gerras, S. (2009). Developing creative and critical thinkers. *Military Review, November-December 2009*, 77-83.

Allen, M., Bourhis, J., Burrell, N., & Mabry, E. (2002). Comparing student satisfaction with distance education to traditional classrooms in higher education: A meta-analysis. *The American Journal of Distance Education 16*(2), 83-97.

Allen, M., Byrum, B., Oliver, J., Russell, T., Young, M., & Babin, N. (2014) Predicting leadership performance and potential in the U.S. Army Officer Candidate School (OCS). *Military Psychology (American Psychological Association), 26*(4), 310-326. doi: 10.1037/mil0000056

American Council on Education. (2017). Retrieved from http://www.acenet.edu

Armstrong, J., (2015). The unique role of two-year honors and programs. *Journal of National Collegiate Honors Council,* 16(2), 15-18.

Arendale, D., & Hane, A. (2014). Holistic growth of college peer study group participants: Prompting academic and personal development. *Research & Teaching in Developmental Education, 31*(1), 7-29.

Artino, A. (2007). Online military training: Using a social cognitive view of motivation and self-regulation to understand students' satisfaction, perceived learning, and choice. *Quarterly Review of Distance Education, 8*(3), 191-202.

Bailey, B. (2007). The Army in the marketplace: Recruiting an all-volunteer force. *Journal of American History, 94*(1), 47-74.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.

Bannier, B. (2006). The impact of the GI Bill on developmental education. *Learning Assistance Review, 11*(1), 35-44.

Barabasch, A., Merrill, B., & Zanazzi, S. (2015). Structural support, networking, and individual survival: Career changes in Italy and Spain. *British Journal of Guidance & Counseling, 43*(3), 323-336.

Barr, A. (2016). Enlist or enroll: Credit, constraints, college aid, and the military enlistment margin. *Economics of Education Review, 51*, 61-78.

Barratt, M. & Lenton, S. (2015). Representatives of online purposive sampling with Austrian cannabis cultivators. *International Journal of Drug Policy, 26*(3), 323-326.

Başaran, İ. (2000). *Organizational Behavior*. Ankara: Feryal Press, 28.

Bikse, V., Lusena-Ezera, I., Rivza, B., & Volkova, T. (2016). The transformation of traditional universities into entrepreneurial universities to ensure sustainable higher education. *Journal of Teacher Education for Sustainability, 18*(2), 75-88.

Blau, G. (1989). Testing the generalizability of a career commitment measure and its impact on employee turnover. *Journal of Vocational Behavior, 35*, 88-103.

Bonwell, C., & Elson, J. (1991). *Active learning: Creating excitement in the classroom*. (1991 ASHE-ERIC Higher Education Reports). Retrieved from ERIC website: http://files.eric.ed.gov/fulltext/ED336049.pdf

Boshier, R. (1991). Psychometric properties of the alternative form of the education participation scale. *Adult Education Quarterly, 41*(3), 150-167.

Boston, W., Ice, P., & Gibson, A. (2011). Comprehensive assessment of student retention in online learning environments. *School of Arts and Humanities*, American Public University System.

Boudreau, T. & Winkler, W. (2011). Warrant officer accessions. *Army Communicator, 36*(1), 8-12.

Bouffard, S. & Weiss, H. (2008). Thinking big: A new framework for family involvement, policy, practice, and research. *Evaluation Exchange, 14*(1&2), 2-5.

Boyle, S., & Abdullah, A. (2015). Factors influencing engagement with higher education pathways programs. *Journal of Developing Areas, 49*(5), 169-182.

Bragg, A. (1976). *The socialization process in higher education*. ERIC/Higher Education Research Report No. 7. Washington, DC: American Association for Higher Education.

Brickman, P. (1987). *Commitment, conflict, and caring*. Englewood Cliffs, NJ: Prentice-Hall.

Brown, R. B. (1996). Organizational commitment: clarifying the concept and simplifying the existing construct typology. *Journal of Vocational Behavior, 49*, 230-251.

Brown, R. (2015). The Army University. *Military Review, 95*(4), 18-28.

Burnett, S. & Segoria, J. (2009). Collaboration for military transition students from combat to college: It takes a community. *Journal of Postsecondary Education & Disability, 22*(1), 53-58.

Buryk, P., Trail, T., Gonzales, G., Miller, L., & Friedman, E. (2015). *Federal educational assistance programs available to service members: Program features and recommendations for improved delivery.* Santa Monica, CA: RAND Corporation.

Calderon, V. & Sorenson, S. (2014, April). Americans say college degree leads to a better life: Say higher education must evolve to meet students' needs. Gallup. Retrieved from http://www.gallup.com/poll/168386/americans-say-college-degree-leads-better-life.aspx

Calvo-Moro, A., Leal, A., & Roldán, J. (2006). Using enablers of the EFQM model to manage

institutions of higher education. *Quality Assurance in Education: An International*

Perspective, 14(2), 99-122.

Capelli, P. (2004). Why do employers pay for college? *Journal of Econmetrics, 121*(1-2), 213-

241.

Carnevale, A., Smith, N, & Strohl, J. (2013). *Recovery: Projections of Jobs and education*

requirements through 2020. Washington, DC: Center on Education and the Workforce,

Georgetown University.

Carson, K. & Bedeian, A. (1994). Career commitment: Construction of a measure and

examination of its psychometric properties. *Journal of Vocational Behavior, 44*, 237-262.

Casazza, M. (1999). Who are we and where did we come from? *Journal of Developmental*

Education, 23(1), 2-7.

Chang, H. & Wang, X. (2016). Interact for what? The relationship between interpersonal

interaction based on motivation and educational outcomes among students in

manufacturing programs at two-year technical colleges. *Community College Review,*

44(1), 26-48.

Charles, C., & Senter, G. (1995). *Elementary classroom management* (2nd ed.). White Plains,

NY: Longman.

Chen, S., Welk, G., & Joens-Matre, R. (2014). Testing the youth physical activity promotion

model: Fatness and fitness as enabling factors. *Measurement in Physical Education and*

Exercise Science, 18(4), 227-241.

Chiocchio, F. & Lafreniére, A. (2009). A project management perspective on student's declarative commitments to goals established within asynchronous communication. *Journal of Computer Assisted Learning, 25*(3), 294-305.

Christenson, S., & Anderson, A. (2002). The centrality of the learning contexts for students' academic competence. *School Psychology Review, 31*(3), 378-393.

Christian, T. & Sprinkle, J. (2013). College student perceptions and ideals of advising: An exploratory analysis. *College Student Journal, 47*(2), 271-291.

Clemmons, A. & Fields, D. (2011). Values of determinants of the motivation to lead. *Military Psychology (Taylor & Francis Ltd), 23*(6), 587-600.

Cohen, A., Brawer, F. & Kisker, C. (2014). *The American community college* (6th ed.). San Francisco, CA: Jossey-Bass.

Cohen, J., Warner, R., & Segal, D. (1995). Military service and educational attainment in the all-volunteer force. *Social Science Quarterly (University of Texas Press), 76*(1), 88-104.

Cooke, T. & Quester, A. (1992). What characterizes successful enlistees in the all-volunteer force: A study of male recruits in the U.S. Navy. *Social Science Quarterly (University of Texas Press),73*(2), 238-252.

Cottrell, R., Girvan, J., & McKenzie, J. (2009). *Principles and foundations of health promotion and education* (4th ed.). San Francisco, CA: Pearson Benjamin Cummings.

Council of College and Military Educators. (2016). Retrieved from http://www.ccmeonline.org/

Collins, R., Haijun, K., Yelich-Biniecki, S., & Favor, J. (2015). Building an accelerated online graduate program for military officers. *Online Learning, 19*(1), 1-10.

Cornell-d'Echert, B., Jr. (2012). Beyond training: New ideas for military forces operating

beyond war. *New Directions for Adult and Continuing Education, 136,* 17-27. doi:

10.1002/ace

Crosling, G., Thomas, L., & Heagney, M. (2008). *Improving student retention in higher*

education: The role of teaching and learning. London: Routledge.

Defense Activity for Non-Traditional Education Support. (2015). Preparing for college.

Retrieved from http://dantes.dodea.mil/index. html

Dattilo, A., Ewert, A., & Datillo, J. (2012). Learning as leisure: Motivation and outcome in adult

free time learning. *Journal of Park & Recreation Administration, 30*(1), 1-18.

Den Hartog, D. & Belschak, F. (2007). Personal initiative, commitment and affect at work.

Journal of Occupational & Organizational Psychology, 80(4), 601-622.

Deutch, B. (Producer). (2017). Hiring America, episode 102. Available from

http://hiringamerica.net/tv-show

Dey, F., & Cruzvergara, C. (2014). Evolution of career services in higher education. *New*

Direction for Student Services, 148, 5-18.

DiPerna, J. (2004). Structural and concurrent validity evidence for the academic competence

evaluation scales-college edition. *Journal of College Counseling, 7*(1), 64-72.

Domene, J., Socholotiuk, K., & Woitowicz, L. (2011). Academic motivation in post-secondary

students: Effects of career outcome expectations and type of aspiration. *Canadian*

Journal of Education, 34(1), 99-127.

Dougherty, B. & Woodland, R. (2009). Understanding sources of financial support for adult
learners. *Journal of Continuing Higher Education, 57*(3), 181-186.

Driscoll, A., Jicha, K., Hunt, A., Tichavsky, L., & Thompson, G. (2012). Can online courses
deliver in-class results? A comparison of student performance and satisfaction in an
online versus a face-to-face introductory sociology course. *Teaching Sociology, 40*(4),
312-331.

Durmont, M. & Provost, M. (1999). Resilience in adolescents: Protective role of social support,
coping strategies, self-esteem, and social activities on experience of stress and
depression. *Journal of Youth and Adolescence, 28*(3), 343-363. doi:
10.1023/A:1021637011732

Eby, L. (1997). Alternative forms of mentoring in changing organizational environments: A
conceptual extension of the mentoring literature. *Journal of Vocational Behavior, 51,*
124-144.

Ekman, R. (2013). Myths and reality about U.S. higher education. *Vital Speeches of the Day,
79(*12), 392-396.

Elliott, S., DiPerna, J., & Malecki, C. (2002). Academic enablers: Critical to student success.
School Psychology Review, 31(3), 298-312.

Elmaraghy, W. & Elmaraghy, H. (1996). *Manufacturing education models in Canada and the
world*. Paper presented at the International Conference on Education in Manufacturing,
San Diego, CA.

Erdle, S., Murray, H., & Rushton, P. (1985). Personality, classroom behavior, and student ratings of college teaching effectiveness: A path analysis. *Journal of Educational Psychology, 77*, 394-407.

Evans, J., Pellegrino, L., & Hoggan, C. (2015). Supporting veterans at the community college: A review of the literature. *Community College Enterprise, 21*(1), 47-65.

Evans, L. (2014). Leadership for professional development and learning: Enhancing our understanding of how teachers development. *Cambridge Journal of Education, 44*(2), 179-198.

Farley, M. (1986). *Personal commitments: Beginning, keeping, changing*. San Francisco, CA: Harper & Row.

Feickert, A. (2014, February). *Army drawdown and restructuring: Background and issues for congress.* Congressional Research Service.

Forbes, D. (2017). Professional online presence and learning networks: Educating for ethical use of social media. *International Journal of Research in Open and Distributed Learning, 18*(7), 175-190.

Francois, E. (2014). Motivational orientations of non-traditional adult students to enroll in a degree-seeking program. *New Horizons in Adult Education & Human Resource Development, 26*(2), 19-35. doi: 10.1002/nha.3.20060

French, D. (2014). Learning to fight. *Academic Questions, 27*(2). 213-218.

Fu, J. (2011) Understanding career commitment of IT professionals: Perspectives of push–pull–mooring framework and investment model. *International Journal of Information Management, 3,* 279-293.

Furtek, D. (2012). Developing a new transition course for military service members in higher education. *College and University, 87*(4), 33-36.

Gamst, G., Meyers, L., & Guarino, A. (2008). *Analysis of variance designs: A conceptual and computational approach with SPSS and SAS.* New York, NY: Cambridge University Press.

Garcia-Izquierdo, A., Moscoso, S., & Ramos-Villagrasa, P. (2012). Reactions to the fairness of promotion methods: Procedural justice and job satisfaction. *International Journal of Selection & Assessment, 20*(4), 394-403.

Gillespie, W. (2001). Teaching the circumference of Army leadership. *Military Review, 81*(5), 12-21.

Gleiman, A. & Zacharakis, J. (2016). Continuing professional education in the military. *New Directions for Adult & Continuing Education, 2016*(151), 81-90.

Gonzalez, G., Miller, L., Buryk, P., & Wenger, J. (2015). *Higher education benefits for Post-9/11 military service members and veterans.* Santa Monica, CA: RAND.

Gottlieb, P., & Fogarty, M. (2003). Brains in the city. *Monthly Labor Review, 126*(10), 44-44.

Guitérrez-Romero, R., Haubrich, D., & McLean, I. (2008). The limits of performance assessments of public bodies: External constraints in English local governments. *Environment and Planning C: Government and Policy, 26*(4), 767-787.

Hamidi, Y., Mohammadibakhsh, R., Soltanian, A., & Behzadifar, M. (2017). Relationship
between organizational culture and commitment of employees in health care centers in
west of Iran. *Electronic Physician, 9*(1), 3646-3652.

Hammond, M. & Lee, C. (2005). NCOS, warrant officers earn college credit hours and associate
degrees. *Army Communicator, 30*(4), 37.

Hammons, J. & Orf, M. (2016). Current faculty rank and promotion policies in public two-year
colleges. *Community College Enterprise, 22*(2), 29-41.

Hitt, S., Sternberg, M., MacDermid-Wadsworth, S., Vaughan, J., Carlson, R., Dansie, E., &
Mohrbacher, M. (2015). The higher education landscape for US student service members
and veterans in Indiana. *Higher Education, 70*(3), 535-550.

Hofmann, E., Faller, N., Limacher, A., Méan, M., Tritschler, T., Rodondi, N., & Aujesky, D.
(2016). Education level, anticoagulation quality, and clinical outcomes in elderly patients
with acute venous thromboembolism: A prospective cohort study. *PLoS ONE, 11*(9), 1-
14. doi: 10.1371/journal.pone.0162108

Hughes, A., Galbraith, D., & White, D. (2011). Perceived competence: A common core for self-
efficacy and self-concept? *Journal of Personality Assessment, 93*(3), 278–289. doi:
10.1080/00223891.2011.559390

Hung, M., Chou, C., Chen, C., & Own, J. (2010). Learner readiness for online learning: Scale
development and student perceptions. *Computers & Education, 55*, 1080-1090.

Humes, E. (2006). *Over here: How the G.I. Bill transformed the American dream*. New York,
NY: Harcourt.

Johnson, W. & Ridley, C. (2008). *The elements of mentoring*. New York, NY: Palgrave
    MacMillan.

Jones, K. (2017). Understanding transition experiences of combat veterans attending community
    college. *Community College Journal of Research & Practice, 41*(2), 107-123. doi:
    10.1080/10668926.2016.1163298

Joo, Y., Lim, K., & Kim, E. (2011). Online university students' satisfaction and persistence:
    Examining perceived level of presence, usefulness and ease of use as predictors in a
    structural model. *Computers & Education, 57*, 1654-1664.

Ju, Y. & Lee, M. (2017). Control function approach for partly ordered endogenous treatments:
    Military rank premium in wage. *Oxford Bulletin of Economics & Statistics, 79*(6), 1176-
    1194.

Kaplan, D. & Ferris, G. (2001). Fairness perceptions of employee promotion systems: A two-
    study investigation of antecedents and mediators, *Journal of Applied Social Psychology,
    31*, 1204-1222.

Karageorge, E. (2014, November). Is a college degree still worth it? Monthly Labor Review.
    Retrieved from http://www.bls.gov/opub/mlr/2014/beyond-bls/is-a-college-degree-still-
    worth-it.htm

Kastenberg, J. (2013). Recent proposals to change the traditional military retirement system to
    mirror the federal service retirement: Eroding discipline and civil-military relations
    through potentially unlawful and certainly questionable acts. *Creighton Law Review,
    46*(3), 369-392.

Kasworm, C. (2003). Setting the stage: Adults in higher education. *New Directions for Student Service, 102*, 3-10.

Kaya, C., Chan, F., Rumrill, P., Hartman, E., Wehman, P., Iwanaga, K., Pai, C., & Avellone, L. (2016). Vocational rehabilitation services and competitive employment for transition-age youth with autism spectrum disorders. *Journal of Vocational Rehabilitation, 45*(1), 73-83.

Keenan, L. (2012). Motivational and persistence factors for military spouses earning a college degree (Doctoral dissertation). Retrieved from http://search.proquest.com.proxy.lib.odu.edu

Kidd, J. & Green, F. (2006). The careers of research scientists: Predictors of three dimensions of career commitment and intention to leave science. *Personnel Review, 35*, 229-251.

King, A. (1997). The crescendo effect in career motivation. *Career Development International, 2*, 293-301.

King, M. (1993). *Academic advising: Organizing and delivering services for student success*. San Francisco, CA: Jossey-Bass.

Kirchner, M. (2015). Supporting student veteran transition to college and academic success. *Adult Learning, 26*(3), 116-123. doi: 10.1177/1045159515583813

Kisker, C. (2016). An inventory of civic programs and practices. In B. Ronan & C. Kisker (Eds.), *Civic learning and democratic engagement: New Directions for community colleges, number, 173* (pp. 13-22). San Francisco, CA: Jossey-Bass.

Kisker, C., Weintraub, D., & Newell, M. (2016). The community colleges' role in developing students' civic outcomes. *Community College Review, 44*(4), 315-336.

Klaykamp, M. (2010). Where did the soldiers go? The effects of military downsizing on college enrollment and employment. *Social Science Research, 39*(3), 477-490.

Kohl, K. (2010). Coping with change and fostering innovation: An agenda for professional and continuing education. *Continuing Higher Education Review, 74*, 9–21.

Kram, K. (1985a). Improving the mentoring process. *Training & Development Journal, 39*(4), 40-42.

Kram, K. (1985b). *Mentoring at work*. Glenview, IL: Scott, Foresman, and Company

Krasny, M., Lundholm, C., & Plummer, R. (2010). Resilience in social-ecological systems: The roles of learning and education. *Environmental Education Research, 16*(5-6), 463-474.

Kumar, R. (2016). Working with families to inspire children's persistence in STEM. *Childhood Education, 92*(5), 358-364.

Lane, M., Hourani, L., Bray, R., & Williams, J. (2012). Prevalence of perceived stress and mental health indicators among reserve-component and active-duty military personnel. *American Journal of Public Health, 102*(6), 1213-1220.

Lange, D., Sears, S., & Osborne, N. (2016). Comprehensive services tailored for the transitional success of veterans in higher education. *Journal of Postsecondary Education & Disability, 29*(3), 277-283.

Lee, I., Suh, S., & Kim, J. (2009). Research on the admission quota policy at cyber universities. White Paper from the Korea Education Research Information Service.

Lee, P., & Pang, V. (2014). The influence of motivational orientations on academic achievement among working adults in continuing education. *International Journal of Training Research, 12*(1), 5-15. doi: 10.5172/ijtr.2014.12.1.5.

Leedy, P. & Ormrod, J. (2013). *Practical research: Planning and design* (10th ed.). Upper Saddle River, NJ: Pearson.

Lerman, R., McKernan, S., & Reigg, S. (2004). The scope of employer-provided training in the United States: Who, what, where, and how much? Retrieved from http://research.upjohn.org/up_bookchapters/168/

Lighthall, A. (2012). Ten things you should know about today's student veterans. *Thought & Action, 28*, 81-90.

Lim, D., & Kim, H. (2003). Motivation and learner characteristics affecting online learning and learning application. *Journal of Educational Technology Systems, 31*, 423–439.

Lokken, J., Pfeffer, D., McAuley, J., & Strong, C. (2009). A statewide approach to creating veteran-friendly campuses. *New Directions for Student Services, 2009*(126), 45-54.

Lowin, L. (2003). Logistics civilian career enhancement program. *Air Force Journal of Logistics, 27*(3), 2-7.

MacFarlane, K. (2016). Tutoring the tutors: Supporting effective personal tutoring. *Active Learning in Higher Education, 17*(1), 77-88. doi: 10.1177/1469787415616720

Mamiseishvili, K. & Koch, L. (2012). Students with disabilities at 2-year institutions in the United States: Factors related to success. Community College Review, 40(4), 320-329.

Mankowski, M., Tower, L., Brandt, C., & Mattocks, K. (2015). Why women join the military: Enlistment decisions and post deployment experiences of service members and veterans. *Social Work, 60*(4), 315-323.

Maslow, A. (1968). *Toward a psychology of being* (2nd ed.). New York, NY: Van Nostrand. (Original published 1962).

Maslow, A. (1969). The farther reaches of human nature. *Journal of Transpersonal Psychology, 1*(1), 1-9.

Mata, H., Latham, T., & Ransome, Y. (2010). Benefits of professional organization membership and participation in national conferences: Considerations for students and new professionals. *Health Promotion Practice, 11*(4), 450-453.

Matilla, J., Tukiainen, S., & Kajalo, S. (2017). Meaning of military ranks. *Defence Studies, 17(4), 359-378.*

McCaslin, S., Thiede, J., Vinatieri, T., Passi, H., Lyon, K., Armstrong, K., & Chitaphong, K. (2014). Facilitating veteran academic success: Veterans integration to Academic Leadership (VITAL) initiative. *Career Planning & Adult Development Journal, 30*(3), 191-209.

McCready, B. (2010). *Supporting student veteran success: Institutional responses to the Post-9/11 GI Bill and the influx of student veterans*. (WISCAPE Viewpoints). Wisconsin Center for the Advancement of Postsecondary Education, Madison, WI.

McGee, D. (2009). Proposal suggests making college degree mandatory for NCOs. *Army Communicator, 34*(3), 43.

McGovern, T. (2012). Supporting the military veteran student. *Diverse: Issues in Higher Education, 29*(4), 21.

McHugh, J., & Odierno, R. (2015, March). A statement on the posture of the United States Army 2015. Committees and Subcommittees of the United States Senate and the United States House of Representatives, 1st Session, 114th Congress.

Medina, E., & Valdés, L. (2015, February). Dynamic models as change enablers in educational mathematics. *Procedia - Social and Behavioral Sciences, 176*, 923-926. doi: 10.1016/j.sbspro.2015.01.559

Mentzer, B., Black, E., & Spohn, T. (2015). An analysis of supports for persistence for the military student population. *Journal of Asynchronous Learning Networks, 19*(1), 31-47.

Meyer, J. & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review, 11*, 299-236.

Miller, L. (2012). 2012 ASTD state of the industry report: Organizations continue to invest in workplace learning. *T+D, 66*(11), 42-48.

Miller, M., Grover, K., Deggs, D., D'Marco, M., Katsinas, S., & Adair, L. (2016). Adult education in community colleges: A new challenge to old problems. *MPAEA Journal of Adult Education, 45*(2), 17-23.

Murdock, C, Crotty, R., & Sayler, K. (2012). Planning for a deep defense drawdown- part I: A proposed methodological approach. Interim Report of the CSIS (Center for Strategic and International Studies) International Security Program. Retrieved from csis.org/files/publication/120522_DD_Interim_Report.pdf.

Murdock, J., Stipanovic, N., & Lucas, K. (2013). Fostering connections between graduate

    students and strengthening professional identity through co-mentoring. *British Journal of*

    Guidance & Counselling, 41(5), 487-503. doi: 10.1080/03069885.2012.756972

Murray, J. (2013). Becoming an early years professional: Developing a new professional

    identity. *European Early Childhood Education Research Journal, 21*(4), 527–540.

National Academic Advising Association. (2017). Academic advising. Retrieved from

    http://www.nacada.ksu.edu

Naidu, S. (2014). Looking back, looking forward: The invention and reinvention of distance

    education, *Distance Education, 35*(3), 263-270.

Novacek, J. & Lazarus, R. (1990). The structure of personal commitments. *Journal of*

    Personality, 58(4), 693-715.

O'Herrin, E. (2011). Enhancing veteran success in higher education. *Peer Review, 13*(1), 15-18.

Paris, A., Târcolea, C., & Dumitraş, M. (2015). Statistical analysis of questionnaires consistency.

    Fiability & Durability, 2015 Supplement(1), 265-269.

Patten, M. (2012). *Understanding research methods: An overview of the essentials.* Glendale,

    CA: Pyrczak.

Patton, C. (2017). Seamless transfers. *Journal of College Admission, 234*, 28-32.

Perreira, T. & Berta, W. (2016). Using focus groups to modify the workplace affective

    commitment multi-dimensional questionnaire (WACMQ) for use in health care. *Journal*

    of Health & Human Services Administration, 39(3), 407-424.

Persyn, J., & Polson, C., (2012). Evolution and influence of military adult education. *New Directions for Adult & Continuing Education, 2012*(136), 5-16. doi 10.1002/ace.20031

Peterson, E. (2012). Improve employee leadership with ideas borrowed from the military. *T+D, 66*(3), 40-45.

Phinney, J., Dennis, J., & Osorio, S. (2006). Reasons to attend college among ethically diverse college students. *Cultural diversity & Ethnic Minority Psychology, 12(*2), 347-366.

Pizan, A., & Ellis, T. (1999). Customer satisfaction and its measurement in hospitality enterprises. *International Journal of Contemporary Hospitality Management, 11(*7), 326-339.

Preston, J., & Claypool, T. (2013). Motivators of educational success: Perceptions of grade 12 Aboriginal students. *Canadian Journal of Education, 36*(4), 257-279.

Raisbeck, E. (2012). Improved personal tutor contact with students is complete sense. *Nursing Standard, 27*(3), 31-32.

Rand, K., & Cheavens, S. (2009). *Hope theory*. In S. Lopez & C. Snyder (Eds.) Oxford handbook of positive psychology (2nd ed., pp. 323-333). New York: Oxford University Press.

Riggs, L., & Hellyer-Riggs, S. (2009). Beyond information, through participation, to new learning for personal and cognitive growth in higher education: Focusing on the process. *The International Journal of Learning, 16*(5), 399-408.

Robelia, B., Greenhow, C., & Burton, L. (2011). Environmental learning in online social networks: adopting environmentally responsible behaviors. *Environmental Education Research, 17*(4), 553-575.

Roman, B. & Kisker, C. (2016). *Civic learning and democratic engagement: New Directions for community colleges, number, 173* (pp. 13-22). San Francisco, CA: Jossey-Bass.

Rosenow, C., Morrison-Graham, K., & Ozolins, E. (2016). Varying formats for two-year college honors seminars. *Honors in Practice, 12*, 95-107.

Ruhupatty, L. & Maguad, B. (2015). Measuring the cost of quality in higher education. A faculty perspective. *Education, 136*(2), 211-228.

Rumann, C., Rivera, M., & Hernandez, I. (2011). Student veterans and community colleges. *New Direction for Community Colleges, 2011*(155), 51-58.

Russell, T. (1999). *The no significant difference phenomenon*. Chapel Hill, NC: Office of Instructional Telecommunications, University of North Carolina

Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54-67. doi: 10.1006/ceps.1999.1020

Sanchez, R., Bray, R., Vincus, A., & Bann, C. (2004). Predictors of job satisfaction among active duty and reserve/guard personnel in the U.S. military. *Military Psychology, 16*(1), 19-35.

Schwartzman, R. (2003). Transforming leader development through lifelong learning. *Military Review, 83*(3), 63-67.

Servicemembers Opportunities College. (2016). Military student education. Retrieved from
    http://www.soc.aascu.org

Simpson, T. (1997). The initial motivation of students enrolling in an adult and workplace
    education programme. *Asia-Pacific Journal of Teacher Education, 25*(1), 67.

Smith, J. & Hollinger-Smith, L. (2015). Savoring, resilience, and psychological well-being in
    older adults. Aging & Mental Health, 19(3), 192-200. doi:
    10.1080/13607863.2014.986647

Sloat, F. (2011). Continuing education and professional enhancement make stronger dental team
    members. *Dental Assistant, 80*(3), 18-19.

Snyder, C. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry, 13*, 249-275.

Soares, L. (2013). By the numbers: Helping presidents meet challenges and innovate solutions.
    Presidency, Fall 2013, 1-3.

Solinger, O., van Olffen, W., & Roe, R. (2008). Beyond the three-component model of
    organizational commitment. *Journal of Applied Psychology, 93*(1), 70-83.

Sosabowskis, M., Bratt, A., Herson, K., Oliver, G., Sawers, R, Taylor, S., Zahoui, A., & Denyer,
    S. (2003). Enhancing quality in the M.Pharm degree programme: Optimisation of the
    personal tutor system. *Pharmacy Education, 3*(2), 103–108.

Spector, P. (1996). *Industrial and Organizational Psychology: Research and Practice*. Oxford,
    England: John Wiley & Sons, Inc.

Stadtlander, L. (2015). Finding your way to a Ph.D. Lexington, KY: Lee M. Stadtlander.

State Council of Higher Education for Virginia. (2016). *Guidelines on award of academic credit for military education, training and experience by Virginia public higher education institutions.* Approved by Council, July 26, 2013. Retrieved from http://www.schev.edu/index/institutional/guidance-policies

Suvedi, M., Ghimire, R., Millenbah, K., & Shrestha, K. (2015). Undergraduate students' perception of academic advising. *NACATA Journal, 59*(3), 227-233.

Taormina, R. (2015). Adult personal resilience: A new theory, new measure, and practical implications. *Psychological Thought, 8*(1), 35-46.

Teachman, J. (2007). Military service and educational attainment in the all-volunteer era. *Sociology of Education, 80*(4), 359-374.

Thomas, J. & Thomas, T. (2015). Mentoring, coaching, and counseling toward a common understanding, *Military Review, 95*(4), 50-57.

Thomason, J. (2013). Move out and forget it: An exploratory look at the effects of deployment on the education of military personnel. *The Journal of Continuing Higher Education, 61*, 106-115. doi: 10.1080/07377363.2013.796262

Training and Doctrine Command. (2015).   Institute for Noncommissioned Officer Professional Development. Retrieved from http://www.tradoc.army.mil/ incopd/reference

Tran, H. & Smith, D. (2017). The impact of employer-sponsored educational assistance benefits on community college student outcomes. *Journal of Financial Aid, 47*(2), 83-100.

Tucker, S. (2001). Distance education: Better, worse, or as good as traditional education? *Online Journal of Distance Learning Administration 4*(4). Retrieved from http://www.westga.edu/~distance/ojdla/winter44/tucker44.html

U.S. Army. (2015). Careers and Jobs: Retrieved from http://www/goarmy.com/careers-and-jobs/become-an-officer/army-officer-faqs.html

U.S. Army Combined Arms Command. (2015). The Army University White Paper.

U.S. Census Bureau. (2013, August). Retrieved from http://www.census.gov/how/pdf/census_veterans.pdf

U.S. Department of the Army. (2004). Army Regulation 621-5. Army Continuing Education System.

U.S. Department of the Army. (2008a). Army Regulation 1-201. Army Inspection Policy.

U.S. Department of the Army. (2008b). Army Regulation 600-8-19. Enlisted Promotions and Reductions.

U.S. Department of the Army. (2013). GoArmyEd. Retrieved from https://www.goarmyed.com/public_money_for _college-tuition_assistance.aspx

U.S. Department of Defense. (2015). About the Department of Defense (DoD). Retrieved from http://www.defense.gov/About-DoD

U.S. Department of Defense (2016). Office of the Under Secretary of Defense (Comptroller), Financial Management Regulation (DoD 7000.14-R).

U.S. Department of Defense (2011). Office of the Under Secretary for Personnel and Readiness. Retrieved from http://prhome.defense.gov/portals/52/Documents/POPREP/poprep2011 /appendixb/appendixb.pdf

U.S. Department of Education. (2015). 8 keys to veterans' success. Retrieved from http:// www.ed.gov/veterans-and-military-families/8-keys-success-sites

U.S. Department of Labor, Bureau of Labor Statistics. (2017, October). Employment projections. Retrieved from http://www.bls.gov/emp/ep_ chart_001.htm

U.S. Department of Labor (2014, January). Occupational outlook handbook. Retrieved from http://www.bls.gov/ooh/Military/Military-Careers.htm

U.S. Department of Veterans Affairs. (2017). Education benefits. Retrieved from http://benefits.va.gov/gibill

U.S. Government, Federal Register. (2014, May). Voluntary education programs. Retrieved from https://www.federalregister.gov/articles/2014/05/15/2014-11044/voluntary-education-programs#h-7

Vacchi, D. (2012). Considering student veterans on the twenty-first-century college campus. *About Campus, 17*(2), 15-21.

Vance, C., Polson, C., & Persyn, J. (2014). Conducting education programs on military installations. *The Journal of Continuing Higher Education, 62*(3), 173-179.

Verdun, D. (2014, July). Senior leaders explain Army's drawdown plan. Army News Service. Retrieved from http://www.army.mil/article/130534/ SeniorleadersexplainArmysdrawdownplan

Walker, B, & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world.* Washington, DC: Island Press.

Weigel, D., Bennett, K., & Ballard-Reisch, D. (2003). Family influences on commitment: Examining the family of origin correlates of relationship commitment attitudes. *Personal Relationships, 10*(4), 453-474.

White, L., Mullins, H., Rumsey, M., Nye, C., & LaPort, K. (2014). Toward a new attrition screening paradigm: Latest Army advances. *Military Psychology (American Psychological Association), 26*(3), 138-152.

Whiteman, S., Mroczek, D., Macdermaid-Wadsworth, S., & Barry, A. (2013). The development and implications of peer emotional support for student service members/veterans and civilian college students. *Journal of Counseling Psychology, 60*(2), 265-278.

Wild, K., Wiles, J., & Allen, R. (2013). Resilience: Thoughts on the value of the concept for gerontology. *Aging & Society, 33*, 137-158.

Wilson, K. (2014). Thank you for your service: Military initiatives on college campuses. *New Horizons in Adult Education & Human Resource Development, 26(*3), 54-60.

Wilson, K., & Smith, N. (2012). Understanding the importance of life mission when advising soldiers. *New Directions for Adult and Continuing Education, 136*, 65-75. doi: 10.1002/ace.20036

Wilson, K., Smith, N., Lee, A., & Stevenson, M. (2013). When the Army post is the campus: Understanding the social and academic integration of soldiers attending college. *Journal of College Student Development, 54*(6), 628-642.

Wilson, M., Liddell, D., Hirschy, A., & Pasquesi, K. (2016). Professional identity, career commitment, and career entrenchment of midlevel student affairs professionals. *Journal of College Student Development, 57*(5), 557-572.

Wilson, R. (2010). For-profit colleges change higher education's landscape. *The Chronicle of Higher Education, 56*(22), A1-A19.

Wooten, N. (2015). Military social work: Opportunities and challenges for social work education. *Journal of Social Work Education, 51*, S6-S25. doi: 10.1080/10437797.2015.1001274

Yang, L., Xu, X., Allen, T., Shi, K., Zhang, X., & Lou, Z. (2011). Mentoring in China: Enhanced understanding and association with occupational stress. *Journal of Business & Psychology, 26*(4), 485-499.

Yarbrough, D. (2002). The engagement model for effective academic advising with undergraduate college students and student organizations. *Journal of Humanistic Counseling, Education & Development, 41*(1), 61-68.

Yildirim, I. (2015). A study on physical education teachers: The correlation between self-efficacy and job satisfaction. *Education, 135*(4), 477-485.

Yoo, S., & Huang, W. (2013). Engaging online adult learners in higher education: Motivational factors impacted by gender, age, and prior experiences. *Journal of Continuing Higher Education, 61*(3), 151-154.

York, R. (2008). Comparing three modes instruction in a graduate social work program. *Journal of Social Work Education 44*(2), 157-171.

Zacharakis, J., & Van Der Werff, J. (2012). The future of adult education in the military. *New Directions for Adult & Continuing Education, 2012*(136), 89-98. doi 10.1002/ace.20031

Zhou, P., Tijssen, R., & Leydesdorff, L. (2016). University-industry collaboration in China and the USA: A bibliometric comparison. *PLoS ONE, 11*(11), 1-18.

APPENDICES

Appendix A

Participant Survey
Motivating and Enabling Factors for Service Members Seeking to Earn a College or
University Degree

Dear Military Veteran Student,

You are being invited to participate in a research study designed to determine the motivating and enabling factors that have influence on Service Members earning a college or university degree. This study is being conducted in partial fulfillment of the requirements in attaining a doctorate in education from Old Dominion University, Norfolk, Virginia.

As a retired Service Member, I understand the lifestyle you endure and how it impacts your ability to attain civilian education. This has led to my research interest in defining and presenting the factors pertaining to Service Members earning college and university degrees. The information gained from this study can be used to provide additional information to institutions of higher education which will assist them in improving their benefits and services for Service Members. By participating in this study, you will be providing the research community with valuable statistical data and information that will be essential in developing initiatives to assist Service Members attain college and university degrees.

Your identity will remain anonymous and your responses will be kept confidential in all regards. Participating in the study is completely voluntary. You may refuse to participate or stop taking the survey at any time without enduring any consequence. Taking the survey constitutes your consent for the researcher to use the information you provided as research data. As the researcher, I will be the only individual with access to the information you provide. If you request to receive additional information pertaining to your rights as a participant, please contact me at the email address below to obtain a copy of an informed consent form.

If you are a Service Member who has been discharged from the Armed Forces and is interested in completing the 27 question survey, please proceed to the next page. It should take approximately 10 minutes to complete the survey.

Thank you for your time and for your willingness to participate in this research.

Rossie Johnson
U.S. Army (Ret) Ph.D. Candidate,
Old Dominion University

Email: rjohn126@odu.edu

Purpose: The purpose of this study is to determine the motivating and enabling factors of Service Members seeking to obtain a college or university degree (Associate, Bachelor, or Graduate).

Directions: Please read each of the questions carefully and select the answer that best pertains to you. Follow the computer screen instructions until you have completed the entire survey. Your participation in this survey is completely voluntary. You may refuse to participate and stop at any time without consequence. Proceeding to the next page constitutes your consent to take the survey. Your answers and your identity will be kept strictly anonymous at all times.

Please answer the following two questions to determine if you are eligible to take this survey.

Are you currently serving in an active or reserve status in the U.S. Armed Forces?

○ Yes (1)

○ No (2)

 Did you retire after 20 years of service from the U.S. Armed Forces?

○ Yes (1)

○ No (2)

If you answered "Yes" to either of the two previous questions, the Department of Defense has not granted research approval for your participation in this study. Please exit the survey now. Thank you for your service!

This section pertains to Service Member motivation.

What are those factors that motivate you in attaining your degree? Motivation is defined as a desire or the reason for wanting to accomplish a goal or task. For statement numbers 1-10, please select one response that best indicates your level of agreement or disagreement.

1. Earning a college degree will aid me in attaining satisfaction.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

2. Earning a college degree will assist me in achieving personal growth.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

3. Earning a college degree will assist me in forming a professional identity.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

4. Earning a college degree will assist me in expanding my knowledge base.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

5. Earning a college degree will assist me in establishing resilience.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

6. Earning a college degree will fulfill the goals of my professional development.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

7. Earning a college degree will enhance my personal and professional education.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

8. Earning a college degree will assist me in attaining a job or career promotion.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

9. Earning a college degree will allow me to be a mentor for others.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

10. Earning a college degree will allow me to demonstrate commitment (to self, family, or career).

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

11. Briefly describe any other factors (not previously mentioned) that you consider as motivating factors for earning a college degree. If you do not have any additional comments to add for this question, leave blank and proceed to the next set of questions.

This section pertains to Service Member enablers.

What are those factors that enable you in attaining your degree? Enablers may include social influences, programs, policies, regulations, or services that provide assistance to an individual. For statement numbers 12-19, please select one response that best indicates your level of agreement or disagreement.

12. An enabler is the type of college or university (traditional; two-year or community college; online institution) a Service Member attends.

    ◯ Strongly agree (1)

    ◯ Agree (2)

    ◯ Neither agree nor disagree (3)

    ◯ Disagree (4)

    ◯ Strongly disagree (5)

13. An enabler is the Tuition Assistance (TA) program offered by the branch of service.

    ◯ Strongly agree (1)

    ◯ Agree (2)

    ◯ Neither agree nor disagree (3)

    ◯ Disagree (4)

    ◯ Strongly disagree (5)

14. An enabler is the use of Veterans Affairs (VA) benefits.

    ◯ Strongly agree (1)

    ◯ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

15. An enabler is state academic support for Service Members (e.g., Virginia, Texas, North Carolina, etc.).

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

16. An enabler is the ability of the college or university a Service Member attends to offer tutoring services.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

17. An enabler is the ability of the college or university a Service Member attends to offer advising and counseling services.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

18. An enabler is the education center at the military installation where the Service Member is assigned.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

19. An enabler is membership in professional associations, organizations, and networks that a Service Member may join.

○ Strongly agree (1)

○ Agree (2)

○ Neither agree nor disagree (3)

○ Disagree (4)

○ Strongly disagree (5)

20. Briefly describe any other factors (not previously mentioned) that you consider enabling factors for earning a college degree. If you do not have any additional comments to add for this question, leave blank and proceed to the next set of questions.

Question 21 pertains to your outlook regarding your personal level of motivation for earning your college degree.   Please choose one response that best indicates your level of motivation.

21. How would you rate your overall level of motivation for earning your college degree?

○ Strongly motivated (1)

○ Motivated (2)

○ Neither motivated nor unmotivated (3)

○ Unmotivated (4)

○ Strongly unmotivated (5)

Question 22 pertains to your outlook regarding your personal satisfaction of the enablers that have been made available to assist you in earning your college degree. Please choose one response that best indicates your level of satisfaction towards your enablers.

22. How satisfied were you with the enablers made available for you during your time in the military?

○ Strongly satisfied (1)

○ Satisfied (2)

○ Neither satisfied nor dissatisfied (3)

○ Dissatisfied (4)

○ Strongly dissatisfied (5)

Questions 23-27 pertain to individual demographics. Please select the response that best pertains to you.

23. Please identify your rank category at the time of your discharge.

   ○ Enlisted (1)

   ○ Warrant Officer (2)

   ○ Officer (3)

24. Please identify your gender.

   ○ Male (1)

   ○ Female (2)

25. How many semesters (or quarters) of college or university course work have you completed?

   ○ 0 (1)

   ○ 1-2 (2)

   ○ 3-4 (3)

   ○ 5-6 (4)

   ○ 7-8 (5)

   ○ 9 or more (6)

26. What is your age range?

   ○ 20-24 (1)

   ○ 25-29 (2)

   ○ 30-34 (3)

○ 35-39 (4)

○ 40-44 (5)

○ 45 and higher (6)

27. What is your highest education level attained?

○ High School (1)

○ Certificate (2)

○ Associate (3)

○ Bachelor (4)

○ Graduate (5)

This concludes the survey. I appreciate you taking the time to provide input which will be valuable information to the higher education community. Thank you!

Appendix B

Introduction Email Sent to Participants

Dear Veteran Military Student,

I am conducting research to fulfill my requirements for a Ph.D. in Education with a concentration in Occupational and Technical Studies at Old Dominion University. I solicit your assistance in obtaining data pertaining to the motivating and enabling factors of Service Members seeking to earn post-secondary degrees.

I ask that you take the time to assist me with this study by participating in the attached survey. You can access the survey at the link below and it should take no more than 10 minutes to complete.

Your participation is strictly voluntary and your input will enable me in providing valuable information pertaining to Service Member education to the higher education community. The Old Dominion University Education Human Subjects Review Committee has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

I can provide you any requested information regarding this survey and the measures used to protect your identity. You can reach me at rjohn126@odu.edu if you have any concerns.

Thank you in advance for taking the time to assist me in this research. Your input will be invaluable to the higher education community.

Sincerely,

Rossie Johnson
Ph.D. Candidate
Old Dominion University

Follow this link to the Survey:

https://odu.co1.qualtrics.com/jfe/form/SV_bwJFj2nF002UpKJ

Appendix C

Follow-up Email Sent to Participants

Dear Fellow Student Veterans,

Recently, you were emailed an invitation to participate in a research study I am conducting to fulfill my requirements for a Ph.D. in Education with a concentration in Occupational and Technical Studies at Old Dominion University. I solicit your assistance in obtaining data pertaining to the motivating and enabling factors of Service Members seeking to earn post-secondary degrees.

If you have completed the survey, thank you for taking the time to participate. If you have not yet participated, please take the time in assisting me increase my quantity of responses. You can access the survey at the link below and it should take no more than 10 minutes to complete.

Your participation is strictly voluntary and your input will enable me in providing valuable information pertaining to Service Member education to the higher education community. The Old Dominion University Education Human Subjects Review Committee has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

I can provide you any requested information regarding this survey and the measures used to protect your identity. You can reach me at rjohn126@odu.edu if you have any concerns.

Thank you in advance for taking the time to assist me in my research. Your input will be used as information for possibly enhancing benefits and services for all Veterans in post-secondary education.

Sincerely,

Rossie Johnson
Army Veteran and Ph.D. Candidate
Old Dominion University

Follow this link to the Survey:

https://odu.co.1.qualtrics.com/jfe/form/SV_bwJFj2nF002UpKJ

Appendix D

Institutional Review Board Exemption

OFFICE OF THE VICE PRESIDENT FOR RESEARCH

Physical Address
4111 Monarch Way, Suite 203
Norfolk, Virginia 23508
Mailing Address
Office of Research
1 Old Dominion University
Norfolk, Virginia 23529
Phone(757) 683-3460
Fax(757) 683-5902

DATE: November 8, 2017

TO: Philip Reed
FROM: Old Dominion University Education Human Subjects Review Committee

PROJECT TITLE: [1097858-3] Motivational and enabling factors for military service members
                              earning a post-secondary degree
REFERENCE #:
SUBMISSION TYPE: Amendment/Modification

ACTION: DETERMINATION OF EXEMPT STATUS
DECISION DATE: November 8, 2017

REVIEW CATEGORY: Exemption category # 6.2

Thank you for your submission of Amendment/Modification materials for this project. The Old Dominion University Education Human Subjects Review Committee has determined this project is EXEMPT FROM IRB REVIEW according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Jill Stefaniak at (757) 683-6696 or jstefani@odu.edu. Please include your project title and reference number in all correspondence with this committee.

VITA

Rossie D. Johnson
1 Hayden Street
P.O. Box 9261
Petersburg, VA 23806
Email: rdjohnson@vsu.edu

Education

B.S.   Business Administration, Saint Paul's College, Lawrenceville, VA, May 1988

M.S.   Administration, Central Michigan University, Mount Pleasant, MI, May 1998

Ph.D. Education, Old Dominion University, Norfolk, VA, March 2018

Summary

A senior level professional with over 25 years of experience in logistics operations, senior staff administration, and policy and program coordination as an officer in the U.S. Army (Lieutenant Colonel) whom has successfully transitioned into higher education. Possesses senior level experience in adult education and training for the Department of Defense.   Presently serving at the director level at Virginia State University overseeing all military relations and educational programs for Service Members and their families. Mission-oriented individual with exceptional strengths in the areas of Education, Leadership, Management, and Training. A valued professional with an impeccable record of success demonstrated through a strong sense of commitment and dedication.

Experience

October 2012 to Present   Director, Military Affairs, VA State Univ., Petersburg, VA

July 2010 to June 2012   Director, Joint Culinary Center of Excellence, Fort Lee, VA

March 2009 to July 2010   Deputy Commander, 8th Transportation Brigade, Fort Eustis, VA

June 2007 to March 2009   Logistics Officer, 1st Sustainment Command, Fort Bragg, NC

Certifications

Demonstrated Master Logistician from SOLE - The International Society of Logistics