

SUPPORTING THE ACADEMIC SUCCESS OF
FIRST-YEAR STUDENT VETERANS

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Abstract: The Post-9/11 GI Bill of 2009 dramatically increased the investment of federal funds that support service members leaving the military and using postsecondary educational institutions as the means of transitioning into the civilian workforce. The transitioning service members are often referred to as student veterans. The increased investment spurred additional accreditation requirements affecting every college and university that receives federal funds for their student veterans. Accrediting bodies enforce policies meant to improve students' degree or certificate attainment. This study assists institutions in maintaining accreditation requirements in two ways. First, the study explains why student veterans are a unique subgroup within the postsecondary student population. Second, the study uses a generalizable, quantitative methodology to determine the best services to support the subgroup's attainment goals. Previous studies found the first year of collegiate study crucial in determining whether student veterans will attain a degree or certificate. Therefore, this study distributed a cross-sectional survey in a Midwestern state that asked student veterans to rate the importance of twenty-two campus services during their first year of collegiate studies. The calculation used to determine the importance of the rated services was a weighted mean score followed by a Chi-square test to determine statistical significance. The study then relied on Schlossberg's widely accepted Transition Model to discuss the services campuses should prioritize for their student veterans. Likely, due to the impact of the GI Bill, the most important service a campus should provide to the unique subgroup is assistance with their VA educational benefits. For campuses prioritizing services for their student veterans, this study suggests an office designated for military-affiliated students that assists with VA educational and non-educational benefits, admissions and enrollment requirements, and academic advising.

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CHAPTER I

INTRODUCTION

The national experiment of providing federal funds to support military veterans pursuing postsecondary credentials uniquely and profoundly influenced higher education policy in the United States. Providing educational benefits to returning World War II service members allowed millions of Americans to improve their socioeconomic status through the attainment of a college degree, strengthening the nation's economy in the process. The successful demonstration set an example for future policy intent on improving all sectors of American society through financially supporting the pursuit of postsecondary credentials.

The experiment that started the shift in national policy is commonly known as the “GI Bill of 1944.” The expansion of America's middle class strengthened the nation from the mid-twentieth century onward, encouraging policymakers to seek other methods of providing seed capital to those historically denied access to higher education (Morris, 2015; Saez & Zucman, 2016). The encouragement resulted in the Higher Education Act of 1965, which allowed federally funded student aid to non-veterans in the form of Title IV funds. The Act altered the business model of higher education by the late twentieth century (Cook, 1998; Hegji, 2017; Holden & Biddle, 2017; Klasik & Hutt, 2019; Oh, 2017; Remenick, 2019). The alteration to higher education's business model resulted in increased oversight of institutions through external accreditation systems.

Voluntary accreditation began in the early twentieth century with minimal federal oversight of higher education, beginning with the implementation of the 1944 GI Bill. The

1965 Higher Education Act caused accreditation to become mandatory for institutions participating in the reception of Title IV funds, and most institutions are reliant on those funds (Hegji, 2017; Oh, 2017). Currently, accreditation oversight and enforcement of policies come from federal, regional, and state agencies referred to as the triad. The external policies of the triad force institutions to have entire departments dedicated to showing how the federal funds they receive (i.e., taxpayer money) and is being used to support their students' pursuit of postsecondary credentials (Flores, 2019; Gillen, 2020; Hegji, 2017; Klasik & Hutt, 2019). Because of triad oversight and enforcement, higher education institutions are compelled to understand how to assist their student population or risk losing the financial support received from government sources. Student veterans—former and current military service members enrolled in a college or university—are one of the student populations higher education institutions must support.

This chapter provides a background of the study, the problem statement, and the professional significance of the study. Additionally, the chapter presents an overview of the methodology and describes the delimitations of the study. The chapter concludes with definitions of the key terms that will be used within the dissertation.

Background of Study

The past decade has observed an increased interest in the field of student veteran studies. Substantial increases in federal funding, policies, accreditation, and research related to student veterans began in 2010. All of the increases stem from the implementation of the Post-9/11 GI Bill in 2009. Signed into law by President Bush, the new GI Bill provided an extensive increase of federally-funded, educational entitlements to the men and women fighting the nation's War on Terrorism (Post-9/11 GI Bill, 2013; Sayer et al., 2014).

An example of increased funding is a comparison of the Post-9/11 GI Bill program over a five-year period. In 2012, the program disbursed \$8.5 billion. In 2016, the program disbursed \$11.8 billion, a thirty-three percent increase (Worley, 2017). The Post-9/11 GI Bill is the largest federal program to financially support student veterans, but it is not the only program. When all

2016 funding programs to military-affiliated students are combined, the combination represents ten percent of the total federal funds to postsecondary institutions, which supports less than five percent of the total student population (ed.gov, 2017; Worley, 2017; Holian & Adam, 2020). A large amount of federal funds in support of military-affiliated postsecondary students is the likely cause for additional compliance measures on institutions through federal policies. Among the policies related to student veterans in the last decade is the VOW (Veterans Opportunity to Work) to Hire Heroes Act signed by President Obama in 2011 (Veterans' Preference, 2016). The VOW Act mandated changes in the military's Transition Assistance Program (TAP) to provide individual counseling for each service member leaving the military.

Another policy, developed in 2012, was a collaboration between the U.S. Departments of Defense, Education, Labor, and Veterans Affairs with non-government agencies and recent student veteran graduates. The collaborative effort sought the best practices for higher education institutions in supporting student veterans (U.S. Departments of Education, Veterans, 2013). In 2013, President Obama introduced the results of the collaboration, which was titled “8 Keys to Veterans' Success” (Baker, 2013). Today, over 2,300 institutions of higher learning “voluntarily affirm” their support of the eight support mechanisms outlined in the document (U.S. Dept. of Ed, 2020).

In 2013, the U.S. Department of Veterans Affairs (VA) changed how it oversees the issuance of GI Bill funds. In that year, the VA began sending letters to every CEO of a post-secondary institution in the United States (U.S. Department of Veterans Affairs, 2018). The letters encouraged every institution to support the “Principles of Excellence” established by President Obama through an Executive Order in 2012 (Order, 2012). The Principles focus on consumer protection safeguards for military-affiliated students using GI Bill-related funds. The letters “strongly encourage” institutional CEOs to agree to support the Principles of Excellence by returning a signed document (U.S. Department of Veterans Affairs, 2018). Failure to return a

signed document jeopardizes the institution's ability to receive GI Bill-related funds issued by the VA.

Another federal policy related to student veterans is the U.S. Department of Defense (DoD) requirement of postsecondary institutions to sign a Memorandum of Understanding (MOU). The MOU is required to receive federal funds for students receiving tuition assistance from the military (U.S. Department of Defense, 2017). Prior to 2017, institutions were asked to sign an MOU every three years. Beginning in 2018, the DoD began requiring institutions to sign an MOU annually as well as demonstrate support for the students authorized to receive tuition assistance. Demonstrating support requires institutions to upload evidence in the DoD's MOU site annually (U.S. Department of Defense, 2017; U.S. Dept. of Education, 2020).

Enforcement of federal policies is the task of accrediting agencies. Accrediting agencies investigate institutional support of students in accordance with policy mandates. Institutions that do not comply with policy mandates run the risk of losing federal funds tied to their students. Institutional development or the use of support systems requires understanding the supported group, which may explain the recent increase in empirical research on student veterans in higher education in the last decade.

Since 2010, there has been a marked increase in research associated with student veterans. From an operational and business perspective, knowing what campus services are most important to supporting their student veterans' educational attainment goals is vital to ensure continued access to federal funding. A common conclusion over the past decade is student veterans form a unique subgroup within higher education, requiring equally unique campus services for collegiate success (Barry et al., 2014; Bonar & Domenici, 2011; Borsari et al., 2017; Brown & Gross, 2011; Canto et al., 2015; Cate, 2011; DiRamio & Jarvis, 2011; Heineman, 2016; Phillips & Lincoln, 2017; Romero et al., 2015; Schiavone & Gentry, 2014). Because of this universally accepted categorization of the population, most studies about the subgroup focus on unique campus services for student veterans.

Problem Statement

A reoccurring recommendation in student veteran literature is for campuses to dedicate a single office to support the unique subgroup's access to resources (Bergman et al., 2014; Dillard & Yu, 2016; Green Beauchamp, 2015; Kato et al., 2016). Many campuses have followed that recommendation. What is less commonly found are studies that recommend services the dedicated office should provide. Further, studies that discuss what services campuses should support their student veterans with are not generalizable. The field of student veteran studies needs generalizable research on what campus services maximize collegiate success for student veterans.

A method of defining collegiate success is degree- or certificate-attainment, which is commonly referred to as *graduation*. This method is consistent with accreditation and policy goals. Numerous studies find that graduation success is highly dependent upon an individual's academic achievement in the first year of collegiate study (Harackiewicz et al., 2002; Koch et al., 2018; Pellegrino & Hoggan, 2015; Radunzel & Noble, 2012; Semer & Harmening, 2015; van der Zanden et al., 2019). Using the first year of college as the primary indicator of collegiate success is consistent with research on student veteran transition. Studies find that leaving the military and entering a collegiate setting is likely the most difficult transition student veterans experience (Olsen et al., 2014; Smith et al., 2017; Semer & Harmening, 2015; Southwell et al., 2018). Relying on previous studies, institutions would best serve their student veteran population with a dedicated office that provides services focusing on first-year success. With the right information, campus leaders could prioritize the services that bolster the first-year success of their student veterans.

The question that drove this research was, what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? By providing generalized results, the study informs postsecondary institutions on how to improve the systems of support for student veterans in their first year. A multi-site study

focused on the campus support experiences military service members had in their first year of college studies quantifies what services student veterans feel were most important to their academic success. This dissertation assists in understanding what current services should be prioritized for student veterans.

Professional Significance

This research study provides an increased understanding of the campus support experiences service members had in their first year of college. The study should be of interest to postsecondary institutions desiring to improve their campus services for student veterans. Results could be of interest to federal policymakers who look for ways to improve attainment rates of student veterans and military-affiliated students. The study may also help individual student veterans determine what campus services they should use to successfully navigate their first year of college.

An increased understanding of this transitional phase may assist future research efforts in providing a greater understanding of how to assist student veterans and other members of the military-affiliated student population. Improved understanding of the first-year experience of student veterans should assist interested parties' in developing better systems to support the academic success of student veterans. This research intends on using this study as a starting point for the conduct of additional studies focused on understanding how to improve the transition military members make into higher education in their attempt to attain postsecondary credentials.

Overview of Methodology

For this quantitative study, a survey was distributed to current student veterans at 25 of the 39 colleges and universities within a single Midwestern state. The survey collected 381 responses. The survey's primary question asked the participants to rate how important each listed campus service was to the participant's first year of college studies following military service. Analysis of the collected data showed what services the responding student veterans felt were most important to their academic success in their first year of college. The primary method for

determining the levels of importance for each of the 22 services was a weighted mean calculation of each service's four importance ratings selected by the participants. A Chi-square test for goodness of fit was used to determine which of the selections were significant.

The survey's initial questions were used to ensure the respondents met the qualifications to participate in the survey. Questions following the primary question were biographical, allowing the study to determine if the sample was a valid representation of the population. The biographical responses also allowed for some comparisons between student veteran types.

Delimitations

Results from a quantitative study are meant to be generalizable. The study attempted to survey all student veterans within one Midwestern state. Because 14 of the 39 possible postsecondary institutions did not participate in the study, not all student veterans had the opportunity to respond to the survey. However, the study did receive adequate responses from the three institutional types—four-year public, two-year public, and private—to suggest the results are generalizable within the state of where the study took place. Due to a multitude of factors, the study's results may not be generalizable to institutions in other states.

One factor is the study focused on the perceptions and experiences of current students about their first year of collegiate studies. If there were not enough participants, outlier responses could skew the results. While the survey appeared to have collected a suitable number of responses to prevent skewing, the study did not collect as many responses as it set out to collect. The primary reason for the lowered number is the reliance on points of contact at participating institutions to distribute the survey to student veterans.

The best method to access the contact information for the state's student veterans was to use institutional veterans' benefits coordinators. To fulfill Veterans Administration and Department of Defense requirements on allocating educational benefits to student veterans, postsecondary institutions have an office or staff member who focuses on meeting federal agencies' requirements. Since most student veterans use their earned educational benefits,

institutional veterans' benefits coordinators have a contact list that includes most of the student veterans on their campuses (Olt, 2018; Zoli et al., 2015). The study attempted to work with the veterans' benefits coordinators at each of the state's 39 colleges and universities. While 25 colleges and universities agreed to participate in the study, the level of assistance at participating institutions varied between coordinators. For a detailed explanation on how the study approached working with the state's institutional veterans' benefits coordinators to collect data, see the Obtaining the Sample subsection of Chapter Three, Methodology.

Definitions of Key Terms

For the purposes of this study, the following unique terms are defined.

Military-affiliated student – is a postsecondary student using VA educational benefits due to a familial relationship with a military veteran who has transferred entitled benefits to the dependent family member.

Student veteran – is a person who has served or is currently serving in one of the United States military organizations in active duty, guard, or reserve role and who is pursuing a degree or certificate at a postsecondary institution. Dependents are not veterans.

Chapter One Summary

Policymakers—such as higher education administrators, government agencies, and accrediting bodies—have increased efforts to assist student veterans in recent years. This dissertation seeks to assist policymaker efforts by determining student veterans' perceptions of what support they believed were important for success in their first year of collegiate studies. Chapter One introduces the background of the study, its professional significance, the problem statement, research questions, and an overview of the methodology. The chapter concludes with a discussion of the delimitations to the study and definitions of the key terms. Chapter Two is the foundation for this dissertation, which is a literature review on student veterans.

CHAPTER II

REVIEW OF LITERATURE

Chapter One introduced the background of the study, its professional significance, the problem statement, the research question, and an overview of the methodology. The chapter concluded with a discussion of the delimitations to the research and definitions of the key terms. Chapter Two is the foundation for this dissertation and is a review of student veteran literature.

Chapter Roadmap

This review begins with a historical contextualization of student veterans before moving to current literature about the population. Because United States' national policy is intrinsic to student veteran research, the review must address historical precedents between the military and higher education before discussing the effects of current student veteran law and policy. The chapter then focuses on student veteran theory and empirical research published in the last decade before addressing the best practices for the attainment of educational goals before reaching its conclusion.

A summary of the search process will follow this section. After the search process summary, the first section of this review is a broad overview of student veteran research, focusing on the implicit acceptance of the GI Bill's influence on student veteran studies. The second section contextualizes the historical connections between the U.S. military and higher education, beginning with the pre-World War I connections. The section then moves to the nationalizing influence of the 1924 Bonus Act and then how the relationships between the military and higher education became entrenched when World War II introduced the GI Bill. The section describes

how the Montgomery version transitioned the GI Bill from a conscription-to-war benefit to an entitlement for voluntary military service. The section ends by summarizing the GI Bill's lasting effects on higher education.

The third section of this chapter brings this literature review to current student veteran studies by summarizing the post-9/11 connections between the United States military and higher education. The section begins with a summary of the influence of the Post-9/11 GI Bill of 2009 on student veterans, the more recent Forever GI Bill of 2017, and current federal regulations on student veterans, all of which attempt to improve degree/certificate attainment for twenty-first-century student veterans. The fourth section of this literature review surveys recent theories and empirical research since the Post-9/11 GI Bill, providing five categories of student veteran research over the past decade. This study labels the five categories as adult learning studies, disability-related studies, adaptation studies, and transition and identity studies.

The fifth section focuses on current student veterans to provide a clear understanding of the population. The section discusses why the population is a unique subgroup in higher education and how the subgroup influences campus diversity and services. The section also looks at the best methods for predicting attainment success and literature on first-year success for student veterans. This literature review chapter closes with a brief conclusion.

Search Process

The literature review process involved three primary methods to locate relevant sources. The first method was to use keywords such as student veteran and higher education, student veteran benefits, and military transition process to search ERIC, BOSS, and Google Scholar. Searches identified journal articles, books, and dissertations relevant to the topic. A second method to find information not found in refereed publications was to search the internet for news articles, government publications, and websites containing student veteran-related material. Finally, an online review of current and past conference agendas of professional associations was conducted (e.g., American Educational Research Association and the Association for the Study of

Higher Education) to locate relevant papers presented on the topic. All information and data gathered from the three search methods were read to determine the appropriateness of use. Sources found to be appropriate were saved and summarized into an annotated bibliography.

Overview of Student Veteran Research

Before World War II, there was not a field of study specifically focused on the interactions between military veterans and higher education. Most pre-World War II research on veterans focused on the best methods for reintegration into society through means other than postsecondary education. Research on veterans as postsecondary students began when millions of World War II veterans returned home and started using their Servicemen's Readjustment Act of 1944 benefits—the original GI Bill—to attend college. Studies on those veterans found positive results in using higher education as a conduit for transitioning military members into society. The positive findings prompted additional federal funds into higher education, strengthening the bond between the United States federal government and American postsecondary education. The effects of additional federal funding caused other oversight requirements for higher education institutions. Contextualizing the influence of the GI Bill since the late 1940s is essential in understanding current student veterans; however, the primary goal of student veteran studies has always been how to reintegrate military veterans back into a peaceful society as productive members using postsecondary education (Abrams, 1989; Alstott & Novick, 2005; Humes, 2006).

Reviewers of student veteran literature will have a difficult time finding a study that does not at least mention the GI Bill. No matter the stated research goal, the influence of the original 1944 GI Bill—and the GI Bills versions that followed—are definitively accepted by researchers studying student veteran populations in the United States. A likely reason for the GI Bill's influence on student veteran studies is the federal law's primary purpose of giving combat veterans skills desired by the nation's workforce. Ever since the success of the original 1944 GI Bill, the United States has used the GI Bill as a tool for reintegrating military veterans into society.

The success of the original GI Bill has caused another nearly universal finding among student veteran research since 1950: student veteran studies anticipate positive results for individual student veterans and society. While most—if not all—student veteran studies suggested improvements on behalf of the population, nearly every study had at least the implicit message that student veterans should successfully attain postsecondary credentials. An explanation for this underlying message was the acceptance of human capital theory within the field of student veteran research since the early 1960s (Blaug, 1976; Sweetland, 1996). The theory posited that investment in the education of a nation's citizenry reaps higher rates of return than investment in the nation's physical components (Holden & Biddle, 2017; Marginson, 2019).

Reviewers of student veteran research will notice similar research spikes following every major conflict since the first GI Bill. The second spike in student veteran studies began in the mid-1950s with Korean War veterans. In the early 1970s, there was a research spike on Vietnam War veterans. Research spikes occurred in the mid-1980s with Cold War veterans, the early 1990s with Gulf War veterans, and the early 2000s with War on Terrorism veterans. Each research spike ultimately tried to ascertain whether the combat veterans were reintegrating effectively; however, there was a spike in 2010 that human capital theory helps explain.

Because the War on Terrorism began in 2001, the research spike in the mid-2000s should have leveled off by 2010, yet, a Google Scholar keyword search using “veterans in higher education” shows a doubling of results compared to the first decade of the twenty-first century. The most likely explanation for the research spike was the passage of the Post-9/11 Veterans Educational Assistance Act of 2008, which went into effect in late 2009. The Post-9/11 GI Bill replaced the Montgomery GI Bill of 1984, and the amount of federal funding the new law provided to student veteran beneficiaries nearly doubled (Dortch, 2017a).

The military uses the GI Bill as a recruiting and retention tool, but according to human capital theory, the federal government saw the educational benefits as an investment in society. For example, the total investment in the first seven years was \$65 billion disbursed to Post-9/11

GI Bill beneficiaries (Congressional Budget Office, 2019). The additional investment helps explain one reason for increased research: the need to understand what effect increased GI Bill benefits had on student veterans. The increase in federal spending brought additional oversight on benefitting postsecondary institutions. Additional monitoring explains a second reason for increased research, which was the need for postsecondary institutions to understand how the requirements affected their policies and practices.

Historical Connections Between the U.S. Military and Higher Education: Pre-9/11

Higher education has a long history with the American military, but the connections seen on college campuses today were not common until the mid-twentieth century. Many current colleges and universities recognize and support student veterans, have Reserve Officer Training Corps (ROTC) units on campus, and routinely conduct U.S. Department of Defense research. Before World War II, American higher education institutions were reluctant to have military connections.

The earliest connections between higher education and the military began following the Revolutionary War when American leadership recognized a need to provide tactical training and a liberal arts education to future military officers. To meet the identified need, President Jefferson established the United States Military Academy (USMA) at West Point, New York, in 1802 (A Brief History, 2018). President Jefferson established the school to train engineers for the military's officer ranks. He also ensured the academy would provide arts and sciences so those same officers could represent the nation's democratic ideals at the highest levels (Coalwell, 2001). The United States Naval Academy at Annapolis, Maryland, established in 1845, and the United States Air Force Academy at Colorado Springs, Colorado, established in 1954, both have the same purpose and distinctions as their forerunner, USMA. Today, all three academies are highly ranked, liberal arts, baccalaureate degree-granting, public institutions.

Even with the establishment of the two military academies prior to World War I, the demand to have educated officers in charge of the nation's military forces only grew in the late-

nineteenth and early-twentieth centuries. Before World War II, there were two national attempts at using American colleges and universities to provide education for military-connected individuals. Neither attempt was successful for two reasons. The first reason was institutions lacked the funds needed to support the additional educational expenses. The second reason was most American colleges and universities reflected the nation's desire against a standing army. The age of collegial independence and separation from the federal government thrived before World War II.

While the United States resisted the professionalization of the military, the nation began to embrace the idea of supporting veterans following World War I. In the years between the two great wars, legislative maneuvers attempted to provide funds to veterans. The effect of those legislative attempts determined the political careers of many American leaders and set the stage for what occurred during World War II when the separation between higher education and the military ended.

Federal government involvement in higher education sparked this increase with direct funding to war veterans through the 1944 GI Bill, increasing the nation's middle class (Cook, 1998). This increase can be argued as a primary reason for the strength of the United States from the mid-twentieth century onward (Saez & Zucman, 2016). The important takeaway was the GI Bill's success established a lasting connection between the military and higher education. The success influenced the acceptance of human capital theory as a national policy, encouraging additional forms of federal funding—particularly federal student aid—to non-veterans authorized in the Higher Education Act of 1965 (Hegji, 2017).

Pre-World War I

The Morrill Land-Grant College Act of 1862 was the first national attempt at using traditional higher education to provide military training (Abrams, 1989). Best known for establishing land grant colleges that specialized in providing education in agriculture and mechanical arts, the Morrill Act was passed during the American Civil War (Thelin, 2004). The

timing of the act coincided with an understanding that the Union did not have a military officer corps necessary to fight an enlarging and perhaps protracted war. Congressman Morrill of Vermont persuaded his fellow Republicans to add a clause in the Act requiring land-grant institutions to provide military training in the curriculum. The provision allowed states to determine the military training curriculum but provided no additional funds for the requirement. Due to a lack of funding, the Morrill Act had little effect on the military officer ranks (Abrams, 1989).

World War I (1915-1918) gave U.S. Congressional members a second opportunity to enhance the professionalization of the military using higher education institutions. The National Defense Act of 1916 formally introduced Reserve Officer Training Corps (ROTC) programs in U.S. colleges and universities (Hammond, 2017). Signed into law during an unpopular war, Congress provided little to no additional funding for institutions to support ROTC units on their campuses (Abrams, 1989). Because of a lack of funding, the National Defense Act of 1916—like the Morrill Act of 1862—had little effect on increasing the military's officer ranks.

The Selective Service Act of 1917 provides another example of the nation's apprehension in supporting the military. The act provided an additional fifty cents in weekly pay to World War I recruits beginning in 2017 but not to servicemembers already engaged in the war (Padleford, 1933). Many Congressional members wanted the salary extended to already-serving service members with bonuses provided as a means of back payment; however, a fear of having a national, professional army prevented the majority of Congress from supporting the additional funds (Abrams, 1989). The lack of widespread support for a standing army prevented Congress from passing any legislation in favor of military professionalization.

Bonus Act of 1924

Once World War I ended, an ideological argument over taxes to support veterans ensued (Alstott & Novick, 2005). The Coolidge administration wanted to reduce income tax rates to pre-war levels, believing the tax burden on Americans during the war should be lifted. Congressional

progressives—Democrats and Republicans—altruistically argued that war veterans should have additional compensation since they missed the financial boon the nation experienced during the war. They suggested the war veterans receive an additional \$1 per day of service. Still, a politically practical reason for the argument was to maintain the high levels of taxation for redistribution to underrepresented groups of Americans (Alstott & Novick, 2005). Regardless of the altruistic or politically practical reason, veterans' groups like the American Legion supported Congressional desires and began a nationwide lobbying effort for financial compensation.

In 1922, Congress passed legislation that called for a one-time bonus payment to war veterans that could be used for educational training or buying a farm or home (Humes, 2006). President Harding vetoed the legislation even though large segments of the nation supported a veterans' bonus. To circumvent the veto, some states (California, Maryland, Iowa, Illinois, Kansas, Colorado, Montana, Oregon, and Oklahoma) passed similar one-time bonus legislation to support war veterans (Kettleborough, 1924). However, due to a conflict with the previously codified federal Soldiers and Sailors Relief Acts law, all legislation passed by those states was eventually overruled. The U.S. Congress and state legislations' efforts to provide bonuses to war veterans were not in vain because the failed legislative actions of 1922 would eventually form the structure of the 1944 GI Bill.

In 1924, amid a politically divided Congress and Executive branch, concessions were made. Congress got the two-thirds majority necessary to override a presidential veto to finally provide bonuses to war veterans (Blakey, 1924). The Bonus Act legislation provided “a \$2.25 billion, twenty-year entitlement program for the 4.7 million veterans of World War I” (Alstott & Novick, 2005, p. 377). The Act was an insurance policy, which was administered by the Veterans' Bureau and would pay World War I veterans directly on January 1, 1945, or upon the death of the veteran (Alstott & Novick, 2005). While the Bonus Act's requirement for a 20-year maturation of endowment funds was not what veterans were looking for, the Act marks the first substantial commitment of the federal government toward military veterans. As a foreshadow of future

federal funding, the Bonus Act's language stated payments would be given regardless of need and paid directly to the veteran.

When the Great Depression began in 1929, America experienced the most significant disparity of wealth in its history (Saez & Zucman, 2016). In 1932, veterans' groups with over a decade of lobbying and organization experience led 40,000 veterans on a protest march in Washington, D.C. (Humes, 2006; Padleford, 1933). The marchers demanded immediate payment of funds promised in the Bonus Act of 1924 rather than waiting for maturation in 1945. Bonus Army marchers set up a makeshift camp in the nation's capital, with some bringing their wives and children to live with them. To remove the Bonus Army in the nation's capital, President Hoover sent in federal troops led by the Army's Chief of Staff, General Douglas MacArthur (Humes, 2006). Federal troops promptly removed the veterans and families out of the camps, but the Republican politicians associated with forcibly removing the protestors paid a heavy political price. In 1932, Franklin D. Roosevelt won the presidency over Hoover and a strengthened Democratic Congress (Alstott & Novick, 2005). The political party shift in Washington ensured World War I veterans received their bonuses just before the presidential election of 1936.

World War II Introduces the GI Bill

In the initial stages of World War II, President Roosevelt created the Office of Scientific Research and Development. The creation of the Office in 1941 allowed institutions of higher education, which were long dependent upon financial support from private businesses, the opportunity to increase revenue streams by agreeing to become a research and development partner with a nation at war. Although the war stopped a few years later, the practice of federal funds to colleges and universities in exchange for research never stopped. In fact, the practice has only intensified over the past eight decades (Hale et al., 2019).

With the end of World War II in sight, President Roosevelt signed Public Law 36, the Servicemen's Readjustment Act of 1944, into law. More commonly known as the GI Bill, the passage of this legislation firmly linked higher education to the military's service members.

Because some consider the GI Bill to be the most important legislation of the twentieth century, the Act of 1944 has reached mythical status. The influence on the rise of the American middle class, access to higher education by previously underprivileged groups, and the precedent for future national policy are all reasons given to award the GI Bill such lofty status (Bennett, 1996; Saez & Zucman, 2016). In essence, the legislation provided federal funds directly to student veterans who could attend the government-approved school of their choice. How the bill became law—and its policy effects on future regulation—must be considered to understand the development of current student veteran research.

Harry Colmery, an attorney from Kansas, World War I veteran, and former Commander of the American Legion, using many of the concepts from the legislative act that President Harding vetoed in 1922, provided the handwritten draft that became the Servicemen's Readjustment Act of 1944 (Harry W. Colmery, 2017, Distinguished; Humes, 2006). The legislative work on the GI Bill was relatively free of Congressional arguments, owing to the recent political fallout surrounding the Bonus Act of 1924 and the Veterans March of 1932. Additionally, the Bolshevik Revolution of 1918 and the rise of the Nazi Regime following World War I showed American politicians that “training a large group of men to kill, then stiffing them once the combat ends, is a dangerous game” (Humes, 2006, p. 12).

The GI Bill offered numerous packages for veterans. In addition to providing stipends to veterans pursuing technical training or a higher education degree, the bill allowed veterans to take on low-interest mortgage loans, which are now known as the VA Home Loan Program. Veterans could alternately choose to use the loans to purchase farms, farm equipment, and business ventures. The bill provided unemployment benefits to veterans and established Veterans Affairs hospitals, but the law's place in history came from the educational benefits provided to veterans. Those educational benefits spurred the growth of the American middle class from the mid-1940s until the late-1970s (Morris, 2015; Saez & Zucman, 2016).

Chapter IV of the GI Bill of Rights outlined the regulations concerning veterans using their educational benefits (GI Bill of Rights, 1944, 2017). Veterans had up to seven years after the end of World War II to use their educational benefits. All war veterans using their educational benefits had at least one year of full tuition paid for but no more than four years. The time of use correlated with the number of years the veteran served since September 1940. The veteran had to show satisfactory progress to a VA administrator to continue receiving educational benefits, which could not exceed \$500 per year in tuition and fees. The administrator would verify tuition and fees and pay the approved institution directly. The administrator would also pay the education-seeking single veteran \$50 per month and \$75 per month if the veteran had a dependent spouse or child. If the veteran failed a course of instruction, the administrator could require the veteran to return all fees associated with the course's program, such as books. The basic structure for administering the GI Bill's educational entitlements has not changed since the original implementation.

Of the 16 million World War II veterans eligible to use the entitlement, 2.2 million received \$5.5 billion in funds to pay for higher education within the first few years after the war (Thelin, 2004). In 1947, forty-nine percent of all college admissions were veterans. By the time the 1944 GI Bill ended in 1956, \$14.7 billion was spent on 7.8 million veterans to use at least a portion of the entitlement toward education or training, producing what many consider America's "Greatest Generation" (Dortch, 2017a; Morris, 2015, p. 16; U.S. Dept of VA, 2013). Humes (2006) states the 1944 GI Bill provided the education for:

fourteen future Nobel Prize winners, three Supreme Court justices, three presidents, a dozen senators, two dozen Pulitzer Prize winners, 238,000 teachers, 91,000 scientists, 67,000 doctors, 450,000 engineers, 240,000 accountants, 17,000 journalists, 22,000 dentists—along with a million lawyers, nurses, businessmen, artists, actors, writers, pilots, and others. (p. 6)

Montgomery GI Bill

Once the benefits of the 1944 GI Bill ended in 1956, the federal government passed various legislative actions to ensure continued entitlement benefits to conscripted wartime veterans (Dortch, 2017a). In forty years, the federal policy on providing educational benefits to veterans moved from providing entitlements to the wartime, conscripted veterans of World War II to the peacetime, all-volunteer veterans of the 1980s (Frydl, 2009). Since the military became an all-volunteer force in 1973, three GI Bills were signed into federal law, beginning with the 1984 Montgomery GI Bill (MGIB).

The MGIB was the first post-selective service, GI Bill. Because the United States Military comprised an all-volunteer force after 1973, Congress determined voluntary service members did not have to take part in a wartime conflict to receive educational benefits (Dortch, 2017a). Military service members who did not engage in combat duty earned MGIB benefits by paying \$100 per month of their salary into an MGIB Bill account during their first year of active duty service. Once three years of active-duty service was completed, the initial \$1,200 the service member paid into became 36 months of funding for full-time attendance in postsecondary education. The benefit was paid out as a monthly lump sum to the veteran, covering all expenses associated with attending a postsecondary educational program.

MGIB legislation clearly expanded on the original 1944 GI Bill. One expansion was that veterans had ten years to begin using the educational benefit instead of the initial seven years. Another increase from the original GI Bill was that Reserve or National Guard service members could also earn educational benefits—though at a lower rate than active-duty veterans. Unlike previous GI Bill versions, MGIB benefits steadily increased to keep up with the average cost of college education in the U.S. For example, in 1985, the maximum monthly benefit was \$300. In 2007, the maximum benefit reached \$1,000, and in 2017, the benefit reached \$1,928 (Morris, 2015; Dortch, 2017a). The legislative expansions of the MGIB continued with the drafting of the Post-9/11 Bill in 2008.

GI Bill Effects on Higher Education

The GI Bill of 1944 affected higher education in four primary ways: 1) it increased federal government involvement in postsecondary education; 2) it increased access to higher education; 3) it increased the marketization of higher education; 4) it increased power to accrediting bodies. The first effect of the GI Bill was the allocation of federal funds to universities for research. While Roosevelt encouraged federal involvement with higher education in 1941 through the creation of the Office of Scientific Research and Development, the passage of the GI Bill was the event that marked a dramatic increase in providing federal funds to higher education (Cook, 1998). The policy of using federal funds to support the GI Bill led to the belief that the federal government could and should support higher education in other ways (Thelin, 2004). Following the original GI Bill, the federal government created the National Institution of Health (1949), the National Science Foundation (1950), and the National Defense Education Act (1958), all of which led to a massive amount of research funds flowing into higher education institutions (Cook, 1998).

Increased access to higher education was the second effect of the 1944 GI Bill. The 1944 GI Bill was the first program to provide federal funds directly to students. The success of delivering educational entitlements to veterans led to the federal government developing other methods of providing funds directly to student populations who previously would not attend college due to cost. The implementation of the GI Bill coincided with the Truman Commission's recommendation. In 1947, the Truman Commission recommended the government increase access to higher education for disadvantaged populations (Humes, 2006; Thelin, 2004). The federal government began seeking ways to increase access to the nation's colleges and universities (Williams et al., 2018). Nearly two decades passed before a means of providing non-entitlement funding directly to students was accomplished.

The 1965 Higher Education Act allowed the federal government to provide grants and loans directly to individual students (Gillen, 2020). What is now called Title IV funds, those

federal funds have become a significant collaboration between the federal government and higher education (Gladieux et al., 2010). The steady increase in Title IV funding to students substantiates the collaboration. In 1980, the total amount of Title IV funds provided to postsecondary students was \$10.8 billion (Budget Service, 2005; Sonnenberg, 2004, p. 10). In AY 2015-2016, the amount was \$125 billion (ed.gov, 2017). When factoring for inflation, the increase amounts to more than a 300 percent increase in Title IV funds over the 35 years, which is a substantial rate of inflation. As a comparative example, the national housing market's inflation rate is around 190 percent over the same period (McMahon, 2020).

The GI Bill's third effect on higher education was the increased marketization of higher education, which is likely an unintended consequence of increased access (Berman & Stivers, 2016; Gillen, 2020). By design, federal funds (grants, loans, or entitlements) can be used at any approved institution, giving students multiple postsecondary options. Most colleges are dependent upon the federal dollars individual students use to pay for their post-secondary education, so like the private business sector, educational institutions began competing for the federal funds provided to individual students.

The competition between institutions to collect the federal funds connected to students could help explain why higher education institutions began taking on business-like characteristics in the 1980s (Newman et al., 2004; Tierney, 1988). To attract more students and the direct federal funds they use to pay for tuition, institutions began offering academic programs and co-curricular activities their customer-students wanted (Williams et al., 2018). While the effect of the GI Bill on the marketization of higher education was indirect, the influence of federal funds to increase access to higher education has been a primary goal of the federal government since the Truman Commission's Report in 1947 (Thelin, 2004). Students spending their federally funded grants, loans, or entitlements at federally-approved institutions met that goal.

Institutions gaining approval to receive federal funds led to the fourth effect of the GI Bill within higher education, which was the increased power of accrediting bodies. Similar to the

oversight on the use of GI Bill educational entitlements, federal grants, and loans disbursed due to the 1965 Higher Education Act required monitoring. Monitoring became the primary task of accrediting bodies (Flores, 2019; Gillen, 2020). Accrediting organizations are responsible for ensuring institutions provide educational programs at an agreed-upon standard. Once offered programs meet accreditation standards, the institution offering the programs is allowed to access federal funds, making accrediting agencies the gatekeepers to federal funds.

The U.S. Department of Education (ED) disburses Title IV federal funds to accredited postsecondary institutions (Hegji, 2019). In U.S. higher education, six regional accrediting bodies are the primary gatekeepers' colleges and universities have to Title IV funds (Gillen, 2020). ED accredits the six regional authorities, which in turn accredit approximately 3,500 colleges and universities across the nation. About 1,500 other postsecondary institutions receive Title IV funds through accreditation by a national commission recognized by ED. Because over one-third of all college students receive federal aid in the form of grants or loans, many institutions would close without the federal funds they receive (Berman & Stivers, 2016; U.S. Dept of Education, National Center, 2020). The increased access of students to colleges and universities, necessitating increased monitoring of federal funds, likely caused the enormous power of accrediting bodies within higher education.

Current U.S. Military and Higher Education Connections: Post-9/11

The military and higher education connection in the United States began during the Revolutionary War when the young nation recognized the need for educated officers. As the country expanded westward, federal money to establish land grant institutions in the late 19th century carried the condition of having Reserve Officer Training Corps programs on the campuses. Following World War I, the nation provided limited benefits to combat veterans. World War II expanded on those benefits to include educational funding to combat veterans. The successful use of educational entitlements to veterans encouraged policymakers to provide grants

and loans to non-veterans, leading to increased federal government involvement in higher education through the late twentieth century.

Since the early twenty-first century, service in the U.S. military practically guarantees combat experience due to the multiple areas of conflict since the September 11, 2001 attacks on America (Elliott, 2015; Ledesma, 2017). Public support for the War on Terrorism encouraged the U.S. Congress and the president to usher in a new era of educational funding for military service members (Post-9/11 GI Bill, 2013). Similar to the expansion of veterans' benefits following World War II, federal law and policy on veterans' educational benefits have experienced a dramatic increase. The Post-9/11 GI Bill began the dramatic increase in funding and policy (Sayer et al., 2014).

Post-9/11 GI Bill of 2009

In 2007, Senator Jim Webb of Virginia authored the legislation that became known as the Post-9/11 GI Bill. Formerly named the Post-9/11 Veterans Educational Assistance Act, President Bush signed it into law in 2008, and the law went into effect in August 2009 (Post-9/11 GI Bill, 2013). Commonly known as the Post-9/11 GI Bill of 2009, the legislation sought to replicate World War II veterans' benefits while retaining some of the benefits of the MGIB (Morris, 2015). The Post-9/11 GI Bill mirrored the 1944 GI Bill by providing specific funds to cover tuition and fees, textbooks, and living expenses a veteran may incur while attending post-secondary education. Like the 1944 Bill, the payment of funds for tuition, fees, and books goes directly to the student veteran's postsecondary institution. Benefits paid directly to the student veteran are housing and living expenses. Qualifying for the Post-9/11 GI Bill requires active-duty military service following September 11, 2001, which is another provision similar to the 1944 GI Bill (Dortch, 2017b).

The Post-9/11 GI Bill retained a couple of the MGIB of 1984 provisions. The first provision was the total amount of educational benefits a veteran could receive. The 1944 GI Bill paid benefits to a veteran based on the time of active duty service from one to four years. For

example, if a veteran served for two years in World War II, the veteran would receive only two years of GI Bill benefits. The Post-9/11 GI Bill legislation adopted the MGIB provision of earning the entitlement following three years of active duty. Also, like the MGIB, the earned benefit is for 36 months of benefits for full-time attendance at an educational institution. Another provision the Post-9/11 GI Bill adopted from the MGIB was offering benefits—at a reduced rate—to non-active duty Reservists and National Guard members.

A new benefit of the Post-9/11 GI Bill not covered in previous variations was the opportunity of the veteran allocating unused, monthly educational benefits to a dependent spouse or child. For example, if the veteran only used 12 months of Post-9/11 GI Bill benefits, the veteran could then allocate 24 months to a spouse. Another legislative addition was giving the veteran 15 years after leaving military service to use the entitlement, which was an increase of five years over the 1984 MGIB. Dependent spouses fell under the same timeline as the veterans, while dependent children who receive allocated benefits had until the age of 25 to use the educational benefits.

For a student veteran to receive Post-9/11 GI Bill educational benefits, there are a few required conditions. First, the student veteran or dependent using the entitlement must attend a post-secondary institution recognized by the U.S. Department of Education as an accredited school. The second condition is the institution where the individual attends must verify whether the individual is successfully navigating through his/her declared academic program to the U.S. Department of Veterans Affairs (VA). Once verified, the VA disburses tuition, fees, and book funds to the institution and housing and living expense funds directly to the veteran's bank account at the end of each month in which the student is taking collegiate coursework. For the veteran, this form of depositing funds is very similar to what the veteran experienced during military service.

In the law's first seven years of implementation (2009 to 2016), the VA allocated \$65 billion to nearly half a million military-affiliated individuals attending a postsecondary institution

(Congressional Budget Office, 2019; NVEST, 2017). Spending for the Post-9/11 GI Bill increased 33 percent during the same period, with \$11.8 billion allocated in 2016 (Worley, 2017). In 2017, the total annual amount a veteran using Post-9/11 GI Bill benefits could receive was \$22,805.34 (Dortch, 2017b).

When grouping the Post-9/11 GI Bill with other military-related funding sources, the amount accounted for 10 percent of the federal funds allocated for postsecondary education in 2016 (ed.gov, 2017; Worley, 2017). Disproportionately, military-affiliated students accounted for a little over four percent of the total post-secondary student population (Bonar & Domenici, 2011; Holian & Adam, 2020; Zoli et al., 2015). Yet, the increase in educational benefits with the Forever GI Bill of 2017 suggests national policymakers continue to support providing an educational pathway for military veterans transitioning into the civilian sector.

Forever GI Bill of 2017

The Forever GI Bill is formally titled the Harry W. Colmery Veterans Educational Assistance Act of 2017, Public Law No: 115-48 (Harry W. Colmery Veterans Ed Act, 2017). The Act was named after the same World War I veteran who hand-drafted the 1944 GI Bill for Congress (Harry W. Colmery, 2017). The naming suggests the positive impacts policymakers wanted to make on the targeted improvements to the Post-9/11 GI Bill. President Trump signed the law on August 16, 2017, and the Forever GI Bill became effective on January 1, 2018. The targeted improvements upon the Post-9/11 GI Bill provisions were to incentivize STEM degrees, making the benefits a lifetime of earnings, and curbing fraud-related issues.

The Forever GI Bill retained most of the Post-9/11 GI Bill provisions and added two improvements. First, it offered an extra year of study for student veterans choosing to pursue STEM degrees. Policymakers recognized the nation's growing need for STEM-related jobs and saw the bill as a way to incentivize student veterans to pursue STEM degrees or certificates (Mann, 2017). The second addition allowed veterans to use their educational benefits throughout

their lives instead of the Post-9/11 Bill's 15-year limit (Harry W. Colmery Veterans Ed Act, 2017).

To curb the fraud-related issues the Post 9/11 GI Bill produced, the Forever GI Bill provided additional funding for state agencies to oversee the postsecondary institutions receiving GI Bill funds (Dortch, 2018). Another fraud-related issue the Forever GI Bill addressed was the training of institutional certifying officials (Dortch, 2018). Before the Forever GI Bill, certifying officials had no requirement to attend training on VA notification. Legislators recognized the lack of training as a cause for delayed and misapplied benefits to student veterans and inserted the requirement into the bill (Dortch, 2018). Both of those fraud-related provisions to the Forever GI Bill definitively allocate oversight power to triad-related agencies—the accrediting bodies responsible for policy enforcement.

The following table compares 1944, 1984, 2009, and 2017 GI Bills.

Table 1*GI Bill Educational Variations*

	1944	1984	2009	2018
Common Name	GI Bill	MGIB	Post-9/11 GI Bill	Forever GI Bill
Legislative Name	Servicemen's Readjustment Act	Montgomery GI Bill for Active Duty	Veteran's Educational Assistance Act	Harry W. Colmery Veterans Educational Assistance Act
Yrs. Available	7	10	15	lifetime
Eligibility Requirement	Active Duty service after Sep 1940 ¹	Active Duty after June 30, 1985 ³	Active Duty service after Sep 11, 2001 ⁴	Active Duty Service after Jan 1, 2018 ⁶
Maximum Annual Benefit per Student Veteran	No more than \$500/yr. for tuition and fees, no more than \$75/mo. for housing. ¹	In 2017, \$1,928/mo. for tuition, fees, and housing. ³	In 2017, \$22,805.34/yr. for tuition, fees, books, housing, and living expenses. ⁴	Post-9/11 with additional incentives for STEM-pursuing student veterans. Unknown max. ⁶
Average Annual Benefit per Student Veteran	\$1,859 ³ (\$14,700 adj)	\$7,717 in 2016 ³	\$14,661 in 2016 ⁵	Unknown
Length of Entitlement	At least one year, no more than four ₁	36 months ³	36 months ⁴	36 months or 48 for STEM
Payment of Entitlement	Tuition, fees, and books to school; housing to SV ¹	All funds directly to SV ³	Tuition, fees, and books to school; housing to SV ⁴	Tuition, fees, and books to school; housing to SV ⁶
Pass to Dependents?	No	No	Yes	Yes
Number of Entitlement Users	7.8 million ² (1944 to 1956)	4.9 million ³ (1984 to 2016)	1.8 million ⁵ (2009 to 2016)	Unknown
Total Spending on Entitlement	\$14.7 billion ³ (\$114.7B adj)	\$25 billion (estimate) ⁷	\$75.6 billion ⁴	Unknown

Note. SV = student veteran. Data in Table 1 taken from ¹ GI Bill of Rights, 1944 (2017); ² Thelin (2004); ³ Dortch, (2017a); ⁴ Dortch, (2017b); ⁵ Worley (2017); ⁶ Harry W. Colmery Veterans Ed Act (2017). ⁷ Estimate based on MGIB Average Entitlement and MGIB Number of Users; no studies found providing exact data.

Federal Regulations on Student Veterans

Along with the passage of the Post-9/11 GI Bill and the Forever GI Bill in the twenty-first century, there have been other federal regulatory efforts directly influencing student veterans. In 2011, President Obama signed the Veterans Opportunity to Work (VOW) Act to ensure all military personnel transitioning out of active duty service received focused counseling and classes to assist in their civilian goals, including college attendance (Veterans' Preference, 2016). The VOW Act mandated changes in the military's Transition Assistance Program (TAP) to prepare departing service members with the tools they need to transition out of the military into civilian life (New GPS Program, 2018). For service members planning on attending post-secondary education, TAP placed the members in a three-day workshop focusing on the transition into an institution of higher learning. Once a large-audience briefing only, TAP was further mandated to provide individual counseling sessions with each departing service member, which includes a review of military records and GI Bill eligibility checks. All members who leave the military after 180 days or more of continuous, active duty service must complete TAP.

Another 2011 federal effort to assist student veterans was the Veterans Integration to Academic Leadership (VITAL) initiative enacted by the Department of Veterans Affairs. The VITAL action sought to establish connections between VA Medical Centers and campus clinical services. While not a federal mandate, the initiative attempted to improve medical and counseling support for student veterans attending postsecondary institutions (McCaslin et al., 2014).

Throughout 2012, the U.S. Departments of Education (ED), Veterans Affairs (VA), Defense (DoD), and Labor collaborated with other non-government agencies (NGOs) and recent student veteran baccalaureate graduates. The collaborative effort produced the “8 Keys to Veterans' Success,” which are considered best practices for veterans in completing degree or certificate requirements (U.S. Departments of Education, Veterans, 2013). In August 2013, when President Obama introduced the “8 Keys to Veterans' Success” document, 250 colleges and universities committed to implementing the key steps at their institutions (Baker, 2013). Today,

2,300 institutions voluntarily support the 8 Keys to Veterans' Success initiative (U.S. Dept. of Ed, 2020).

Building on that collaborative effort, President Obama introduced the “Principles of Excellence” in an Executive Order in 2012 (Baker, 2013; Order, 2012). The Principles focus on consumer protection safeguards for military-affiliated students in an attempt to prevent institutions from taking GI Bill-related funds without providing the education promised to the student. Since 2013, the VA has sent out letters to every Chief executive officer (CEO) of postsecondary institutions in the United States, actively encouraging the CEOs to agree to support the Principles of Excellence by returning a signed document (U.S. Dept. of Veterans Affairs, 2018).

Before 2017, the U.S. Department of Defense (DoD) required postsecondary institutions to sign a Memorandum of Understanding (MOU) every three years to receive military tuition assistance funds (U.S. Dept. of Defense, 2017). Beginning in 2018, institutions wishing to continue to receive military tuition assistance must now sign an MOU annually as well as demonstrate support for the students authorized to receive tuition assistance. The DoD has a dedicated MOU site for the annual requirement of institutions to prove student veteran support.

Degree/Certificate Attainment is the Investment Goal

The struggle to use American higher education in the refinement of military service members changed with the GI Bill of 1944. The nation's twelve-year investment of \$14.7 billion (\$144.7 billion, adjusted in 2008 dollars) for the 7.8 million World War II servicemembers was considered an overwhelming success in the improvement of the workforce (Dortch, 2017a). The success fostered the development and integration of human capital theory into national policy since the early 1960s (Holden & Biddle, 2017; Marginson, 2019). The idea of investing in the education of citizens took root, leading to enormous changes in American society and higher education. Changes strengthened the research relationship between government and institutions

and spurred the growth of the American middle class. Investment of federal Title IV funds increased access to higher education, increased marketization, and empowered accrediting bodies.

Once the original GI Bill's funding ended in 1956, the federal policy of providing educational entitlements to conscripted wartime veterans continued with minor changes to the original 1944 Bill. The three GI Bills written since the military became an all-volunteer service in 1973 continue to see the investment of federal funds into the education of all military service members as a national workforce program. The MGIB of 1984 allowed non-combat veterans to participate. Twenty-first-century combat veterans of the War on Terrorism received additional benefits through the Post-9/11 GI Bill of 2009. To assist in national workforce needs, the Forever GI Bill of 2017 incentivized student veterans to pursue a STEM degree.

Through a significant increase in funding, the Post-9/11 GI Bill of 2009 hoped to emulate the success of the GI Bill of 1944 (Morris, 2015). Military-affiliated, federal funding in the last decade equates to ten percent of federal funds for less than five percent of the postsecondary student population (ed.gov, 2017; Phillips & Lincoln, 2017; Worley, 2017). But national interest in the success of student veterans extends beyond the passage of the 2009 GI Bill. Other requirements include federally mandated adjustments to how the military prepares departing servicemembers for a transition into higher education. Another is how postsecondary institutions incorporate policy and procedures to support student veteran success. Finally, strengthening the oversight of military-affiliated funding all demonstrate a focused national strategy on maximizing the return on the Post-9/11 GI Bill investment.

The national strategy is to provide student veterans with a successful transition from the military to the civilian workforce through the attainment of a postsecondary degree or certificate. In exchange for receiving disproportional levels of funding student veterans provide, federal agencies ask for and sometimes require higher education institutions to foster successful attainment of degrees and certificates by developing and maintaining effective support systems (Jenner, 2017; Remenick, 2019). Developing effective systems of support requires an

understanding of the population for which the systems are designed. The need to understand student veterans possibly explains the recent increase in theoretical and empirical research on student veterans in higher education.

Theories and Empirical Research since the Post-9/11 GI Bill

Since 2001, members of the student veteran population have all participated in a military continuously in armed conflict. America's War on Terrorism is still ongoing (History.com Editors, 2021). Current military veterans attending postsecondary educational institutions have challenges similar to their twentieth-century predecessors—except the conflicts they participated in have not been resolved. In the first decade of the twenty-first century, the amount of research conducted on student veterans expanded gradually. In the second decade, following the implementation of the Post-9/11 GI Bill of 2009, the amount of research on student veterans nearly doubled. This section summarizes the theoretical perspectives and empirical findings since the passage of that bill.

The last decade's research of student veterans accepts the population as a unique subgroup within higher education (Phillips & Lincoln, 2017; Romero et al., 2015). Subgroup members are adult students who have backgrounds and needs particular to military service members. Like other adult students, student veterans focus on completing degree requirements, not traditional student campus activities (Olt, 2018; Schivone & Gentry, 2014). Many student veterans have war-related injuries (mental and physical disabilities) that factor into their navigation of a higher education degree or certificate (Bonar & Domenici, 2011; Graf et al., 2015; Karp & Klempin, 2016). Before becoming student veterans, the military trained the subgroup's members to be self-reliant, which is a trait that could prevent college students from seeking necessary assistance but a quality that can support student veterans if properly understood (Alfred et al., 2014; Garcia et al., 2011). The transition student veterans make from military service members to higher education students is typically more significant than what other student populations—particularly traditional students—have to make (Olsen et al., 2014; Smith et al.,

2017). Possibly the most prominent transition student veterans go through is the new identity and adaptation to a cultural bureaucracy that focuses on individualism rather than team efforts (Semer & Harmening, 2015; Southwell et al., 2018).

Even with increased research on student veterans, there are still misconceptions surrounding the subgroup, leading to faculty and staff making inaccurate assumptions about military-affiliated students, particularly student veterans who have spent considerable time in the military before entering college (Canto et al., 2015; Chua & Evans, 2018). While the increase in research has raised awareness of the need to provide specific services for student veterans, studies also find student veterans do not believe faculty and staff understand them (Dillard & Yu, 2016; Jenner, 2017; Zoli et al., 2015).

In the last ten years, student veteran researchers have used a wide range of theoretical perspectives to frame their studies. In this section, those perspectives are grouped into five broad classifications. A commonality among all five groupings is the innate perspective of seeking attainment success for the student veteran population. This researcher did not find any views seeking ways to limit the attainment success of student veterans, suggesting the use of human capital theory in the early 1960s is still a pervasive underpinning of student veteran research (Blaug, 1976; Holden & Biddle, 2017; Marginson, 2019; Sweetland, 1996).

The first grouping of the past decade's perspectives on student veteran research was adult learning theories. The use of adult learning to frame student veteran studies was so pervasive that it became a standard perspective for all student veteran researchers. The next group was disability-related theories. Researchers using disability-related approaches studied how campuses may best support military veterans who had post-traumatic stress disorder (PTSD), traumatic brain injuries (TBI), physical deformities, and other disabilities. The grouping that followed disability-related studies was adaptation perspectives. Adaptation theory researchers used theoretical frameworks such as self-efficacy, self-reliance, resilience, and grit as the lens to study

methods for assisting student veterans, particularly those who enter college with a military-related disability.

The fourth group of framing perspectives used to study student veterans after the Post-9/11 GI Bill are transition theories. Transition frameworks account for the experience of leaving the military and becoming higher-education students. Like adult learning perspectives, transition-related theories are normative for current student veteran researchers. The last broad group of research perspectives found in the previous decade is identity-related theories. Identity theories help explain many of the issues student veterans have on collegiate campuses and likely stem from transition theories because they point to a crisis for student veterans who have to change their military-related identity into a collegiate-related one.

Adult Learning Studies

Research in the last decade about veterans in higher education begins with acceptance of the population as a subgroup within the nontraditional adult student population (Barry et al., 2014; Phillips & Lincoln, 2017). Like other adult students, student veterans are typically over 24 years old, work while attending school, do not live on campus, and are pursuing a degree to increase employability (Anderson & Goodman, 2014; Bergman & Herd, 2017; DiRamio & Jarvis, 2011). Because of those characteristics, many researchers use theories related to adult students to view student veterans.

Since Malcolm Knowles introduced andragogy or adult learning theory in 1980, multiple researchers have used the perspective and further developed the theory (Chen, 2014; Hunter-Johnson, 2018; Merriam, 2001). Adult learning perspectives contain four primary tenets that make andragogy different from pedagogy. The first tenet is that adult students do not want to be told what they should learn. A second difference is adults learn better in discussions and team projects rather than lectures or directed readings. A third tenet is that adult students are ready to learn things they need rather than something they ought to know; they want relevant material rather than broad ideas. Finally, adult students desire to change social roles.

Even when student veteran studies are not overtly using an adult theory as the research perspective, findings generally correlate to three of the four tenets found in adult theories. Student veterans do not want to be told what they should learn (Bergman & Herd, 2017). They want courses that provide useful knowledge rather than theoretical knowledge (Cruise & Misawa, 2019). Student veterans are using their earned GI Bill benefits to attend postsecondary training so they can have social mobility (Callahan & Jarrat, 2014; Kirshner, 2015).

The one tenet that deviates from an adult theory tenet is learning through discussions and group projects. This finding seems odd because student veterans come from a military culture of continuous communication and teamwork; however, studies have found student veterans avoiding classroom discussions and group projects that involve traditional students (Hunter-Johnson, 2018; VacChi, 2012). A reason is that student veterans believe the other student groups—and most faculty and staff—hold misconceptions about the military. Another reason is, according to student veterans, traditional students have a poor work ethic and do not accept personal responsibility (Albright & Bryan, 2018). Because of the misconceptions by other campus constituencies and a strong desire to not work with other students in group projects, student veterans often feel alone in campus settings, choosing to conduct classes online when possible (Brown and Gross, 2011; Olt, 2018; Zoli et al., 2015).

Some adult studies found student veterans more willing to participate in discussions and group projects when they perceive the campus to be military friendly, particularly a welcoming faculty and staff (Brown & Gross, 2011; Green Beauchamp, 2015; Moon & Schma, 2011). Like most other students, student veterans learn better in discussions and enjoy working on group projects when they perceive the environment is safe (Lim et al., 2018). Some studies have found that when campuses adopt a “Military-Friendly Campus,” other campus constituents appear to benefit from student veteran perspectives (Albright & Bryan, 2018; Heineman, 2016).

Disability-Related Studies

Another common perspective found in student veteran studies over the past decade is disability-related theories. Disability-related research on student veterans generally focuses on mental disabilities and psychological health and—to a lesser extent—physical disabilities and health risk behaviors (Ackerman et al., 2009; Alfred et al., 2014; Barry et al., 2014; Graf et al., 2015). Much of the decade's early research aligned with military policy discussions, which focused on improving counseling services to military veterans. Research on how campuses could provide health services to their student veterans who had physical and mental injuries caused by war dominated early disability-related studies (Barnard-Brak et al., 2011; Castro & Kintzle, 2014; Church, 2009; Sayer et al., 2014).

The preponderance of early research on mental health issues associated with student veterans led to a belief the entire subgroup has some form of mental disability (Ackerman et al., 2009). Mental disability was a common finding among War on Terrorism veterans, with about one-third of the population possessing Traumatic Brain Injury (TBI), Post-Traumatic Stress Disorder (PTSD), or depression (Barnard-Brak et al., 2011; Barry et al., 2014; Church, 2009; Eakman et al., 2016). Although the same research showed marked differences in combat veterans and non-combat veterans, campus perception of the entire subgroup remained generally negative (Cate, 2011; Eakman et al., 2016). The studies provided insight into challenges student veterans face and laid the groundwork for the improved disability-related research that followed (DiRamio & Jarvis, 2011; Elliot, 2015). For example, the effects of counseling/therapy for student veterans on academic achievement found that students with PTSD performed worse in educational measurements than students without PTSD (Albright & Bryan, 2018; Heineman, 2016). The decade's early focus on disability research delayed research on the educational experiences of student veterans, including academic functioning and performance and relational difficulties the subgroup has with non-veterans (Ghosh & Fouad, 2016; Zoli et al., 2015).

As disability-related studies began looking at how a combination of services assisted student veterans, they reached a similar conclusion: counseling services alone appeared to have a limited effect on the subgroup (Cate, 2011; Canto et al., 2015; Eakman et al., 2016; Elliott, Gonzales, & Larsen, 2011). Studies found that student veterans who received more support than just mental health counseling were more likely to attain degrees or certificates. The consensus among student veteran researchers was a wide variety of campus services beyond counseling are needed to support student veterans effectively. Later, disability-related studies recognized student veterans as needing not just a range of services but specialized services targeted to meet their unique needs (Canto et al., 2015; Ghosh & Fouad, 2016).

Adaptation Studies

Adaptation studies focused on how campuses provided student veteran-specific services and theoretical perspectives that build upon military training might provide a supportive collegiate environment. Adaptation researchers recognized the inability of campus health services alone to support student veterans, primarily because members generally did not seek counseling services (Bonar & Domenici, 2011). Trained by the military to endure brutal combat situations, student veterans are culturally conditioned not to complain or seek additional resources in accomplishing their given mission (Southwell et al., 2018). The training student veterans received in the military negatively impacts their attempts to navigate college because they tend not to seek assistance (Alfred et al., 2014). Researchers found the same training adapts well with theoretical perspectives such as resilience, hardiness, grit, self-advocacy, and self-efficacy (Barnard-Brak et al., 2011; Castro & Kintzle, 2014; Eakman et al., 2016; Karp & Klempin, 2016; Kinney & Eakman, 2017). These perspectives assume that since military veterans learned to adapt to hostile environments before college, they could learn to function in collegiate environments that could also be imposing and foreign.

For some researchers, the findings highlight the negative aspects of masculine behavioral norms military service members adopt (Garcia et al., 2011). Other studies suggested service

members receive the resilience training needed to attain a college degree before members leave the military (Eakman et al., 2016; Elliot, 2015). Still, other studies concluded student veterans could learn to become resilient in a higher education setting when properly supported (Cate, 2011; Castro & Kintzle, 2014).

A hallmark of adaptation studies is the support provided to student veterans. One study concluded the most significant factor in adult student persistence rates is how well a campus provides specific services for that population (Bergman et al., 2014). Because student veterans are often not aware of the services explicitly designated for them, some studies concluded the crucial support campuses should have for the subgroup is a single office providing information on available resources (Kirchner, 2015; Moon & Schma, 2011; Zoli et al., 2015). Other studies added to this conclusion by suggesting campuses that provide a single office need to place the office in a highly trafficked area to assist in the visibility among the subgroup (Bergman et al., 2014; Green Beauchamp, 2015; Kato et al., 2016).

Some of the past decade's early adaptation studies called for veterans-only learning communities and classrooms on campuses (Elliott et al., 2011; Schiavone & Gentry, 2014; Semer & Harmening, 2015). One study looked into how a campus that focused support efforts on their student veterans doubled the subgroup's population in three years (Brown & Gross, 2011). The study found the campus initiatives started for student veterans also benefited other student groups. Another study focusing on career adaptability concluded resources provided to student veterans in determining academic majors likely aided other student groups (Ghosh & Fouad, 2016).

Adaptation studies suggest faculty and staff improve their understanding of student veterans because the majority of student veterans perceive that non-veteran faculty, staff, and students have little to no awareness of the challenges former military students face (Ward, 2019). Studies suggest that most faculty and staff want to have a supportive campus for student veterans but do not have the training and resources to adequately understand the population's needs (Albright & Bryan, 2018). For campuses to support student veterans and provide adaptations

benefitting student veterans, improved campus training needs to occur (Barnard-Brak et al., 2011; Green Beauchamp, 2015). For example, faculty should be aware that student veterans will follow explicit directions and not ask for assistance or support; doing otherwise in the military is a sign of weakness (Lim et al., 2018).

Transition Studies

Similar to the acceptance of adult theory studies, student veteran researchers accept the use of transition perspectives—openly or implicitly. Generally, student veteran studies conclude the transition from being a military service member to becoming a postsecondary student is difficult. Some studies find the change as the most challenging transition a service member could make (Griffin & Gilbert, 2015; Kato et al., 2016). Some studies conclude the change is more difficult for female veterans than male veterans (Albright et al., 2019; Elliott, 2015; Pellegrino & Hoggan, 2015). Most studies conclude that unless student veterans get proper campus support, their attempted transition is likely to fail (Brown & Gross, 2011; Elliot, 2015; Lim et al., 2018). While the transition student veterans make is viewed as difficult, studies have found veterans benefitted from their college experience (DiRamio & Jarvis, 2011; Olsen et al., 2014; Schiavone & Gentry, 2014; Smith et al., 2017; Zoli et al., 2015).

The transition perspective most used by student veteran researchers is Schlossberg's Transition Theory (Ackerman et al., 2009; Bergman & Herd, 2017; DiRamio & Jarvis, 2011; Griffin & Gilbert, 2015; Pellegrino & Hoggan, 2015). Schlossberg's seminal theory is that adults assume “new patterns of behavior” due to changes in “relationships, routines, assumptions, and roles” (Schlossberg et al., 1995, p. 27). How the adult perceives the changes and accepts the new patterns primarily determines if the transition is a positive experience or a negative one. Schlossberg's theory allows researchers to categorize how the adult is coping within particular transition phases by using her 4 S's model—situation, self, support, and strategies.

The *situation* is the transitional phase of the adult's location. The transitioning adult is located in one of three phases: moving into, moving through, or moving out of the transition

(Chickering & Schlossberg, 1995). *Self* is what skills and abilities the adult personally brings to each transitional phase and includes personal beliefs, economic status, and demographic characteristics. *Support* is what outside resources the adult has during each transitional phase. The *strategy* is the plan the adult uses to navigate each transitional phase (Schlossberg et al., 1995). Using Schlossberg's model, researchers can situate the adult in a transitional phase and explore the adult's resources and strategy to navigate the phase.

Transition studies that do not use Schlossberg's theoretical model will typically use occupational- or career-related theories and models. Researchers find related models useful in providing career counseling to student veterans (Canto et al., 2015). Because student veterans have occupational experience before attending college, they not only have a frame of reference in determining possible career choices, but they might have experience directly related to their academic goals (Ghosh & Fouad, 2016). Many studies found student veterans want to bring what they learned in the military to their civilian career, reinforcing the use of an occupational-related lens to study transitions (Cancio, 2018; Ghosh et al., 2019).

There have been at least two models developed for student veteran transitions. The first is the Military Transition Theory (Castro & Kintzle, 2014). Designed as a framework to assist practitioners of military veteran psychological counseling, the model addresses unique aspects of student veteran transitions. Other researchers have not used the model, perhaps because it resembles Schlossberg's. Since Schlossberg's theory is not specific to veterans, that is the reason for the second model's development. Veteran's Critical Theory developers suggested researchers use it to describe the particular transitional barriers student veterans face on college campuses (Phillips & Lincoln, 2017). Another study argued against using Schlossberg's model because of its design to counsel individual adults, and it was not malleable enough to predict adult group behavior, particularly student veterans (Jenner, 2017). The study suggested using identity-related models to view student veterans.

Identity Studies

Around the midpoint of the last decade, researchers using transition models to study student veterans began calling for the use of identity-related perspectives. Despite the financial advantages the Post-9/11 GI Bill gave to student veterans, researchers found they were having a difficult time transitioning into and through college successfully. A possible reason for the group's difficulty was individual members' reluctance to embrace their new situation and accept the identity of a college student. Numerous researchers agreed with approaching the transition student veterans experience as identity-related challenges (Bergman & Herd, 2017; Borsari et al., 2017; Canto et al., 2015; Herman & Yarwood, 2014; Jenner, 2017; Jones, 2013; Kirchner, 2015; Lim et al., 2018; Meiners, 2019; Southwell et al., 2018). According to Schlossberg's 4-S's Model, an adult must accept his/her new situation for the other three S's—self, support, and strategy—to have a positive influence (Chickering & Schlossberg, 1995; Schlossberg et al., 1995). The call for using identity perspectives was to improve understanding of the transitional struggles found in student veteran research.

A recurrent finding in student veteran studies was the inability to integrate into the college of attendance. Researchers found that members do not feel they have many things in common with non-military students, faculty, and staff (Olt, 2018). Nearly half of all student veterans do not feel connected to the institutional campus they attend (Elliot et al., 2011; Young & Phillips, 2019). Consequently, they had a hard time acquiring the relationships needed to access the resources students need for successful attainment (Bergman & Herd, 2017). Student veterans did not drop out due to financial reasons—the primary reason other non-veteran students leave higher education (Alschuler & Yarab, 2018). They left because they felt like outsiders in a foreign culture.

According to Social Integration Theory, individuals must feel part of the organization to integrate into the organization's culture (Ashforth & Mael, 1989). Student veterans' identity, developed during their time in the military, appears to be the integration issue, as it is quite

different from most college cultures (Herman & Yarwood, 2014; Jones, 2013; VacChi, 2012). The military teaches common goals, group success, and working with the tools provided in the job that is 24 hours per day, seven days per week (Atuel & Castro, 2018; Church, 2009). College culture seems to highlight individual success, independent thinking, asking for additional resources, and partitioned time separating classroom activity from personal activity (Lim et al., 2018). Student veterans felt military values of cooperation and respect make it more inclusive than the civilian world that seems to highlight and support differences (Dobson et al., 2019). Student veterans' inability to accept their new identity and integrate into the institution's culture could produce the feeling of being in a marginalized group.

Marginalized group studies within higher education often use identity-related perspectives (SECond Mission, 2018; Tajfel & Turner, 2004; Wooten & Condis, 2018). Models such as Phillips & Lincoln's (2017) Veterans Critical Theory are developed and used to study the unique identity of a marginalized group. Identity studies have found that female veterans often have a larger identity struggle than their male counterparts. Because they have to transition from a primarily male-dominated military role to a civilian role where their expectations are to be more feminine, female veterans have increased gender role expectations placed on them (Albright et al., 2019; Alfred et al., 2014). A benefit to the recent use of identity perspectives is the findings that—like other unique subgroups such as minority students such as first-generation students and LGBTQ students—student veterans add diversity to campuses that appear to benefit the overall student population (Karp & Klempin, 2016; Ledesma, 2017).

Current Student Veterans

The 2009 implementation of the Post-9/11 GI Bill shapes current student veteran studies. The federal investment into military service members appears to incentivize recipients to attend postsecondary educational programs, which is evidenced by a majority of military members planning on using their GI Bill benefits when they leave the military (Bailey et al., 2019; Kirchner, 2015; Zoli et al., 2015). In the past decade, of the five million veterans who have

transitioned out of the military, around two million have used their GI Bill benefits to pursue a postsecondary degree or certificate in an attempt to increase career opportunities (Bergman & Herd, 2017; Borsari et al., 2017; Hartle, 2017). For military service members, attending an institution of higher learning is highly likely. The past decade not only saw a significant rise in the federal government's financial investment into the student veteran population, but studies on the subgroup also doubled in the past ten years.

The increase in student veteran studies was likely due to the need to improve understanding of the population receiving GI Bill benefits. Once federal funding increased, federal regulations on the postsecondary institutions receiving the funding also increased. Knowing how to best support student veterans allows institutions to comply with the GI Bill guidelines and improve the educational experience of the students attending the institution. Improved experiences should spur increased retention of students, which is a goal of nearly all campuses (Wenger et al., 2017). One significant finding over the past decade is that student veterans are unique among campus populations.

Unique Subgroup

Student veterans are keenly aware of the differences they have with other student groups (Barry et al., 2014; Canto et al., 2015; Dobson et al., 2019). Researchers agree and consider student veterans as a unique subgroup within the postsecondary student population for several reasons (Barry et al., 2014; Bonar & Domenici, 2011; Borsari et al., 2017; Brown & Gross, 2011; Cate, 2011; Canto et al., 2015; DiRamio & Jarvis, 2011; Heineman, 2016; Romero et al., 2015; Schiavone & Gentry, 2014). Some of the reasons previously discussed in this literature review include higher education's history with the military, educational benefits afforded to veterans, federal-level policy decisions specific to military-affiliated students, and the transitional difficulties student veterans endure. These reasons—along with others discussed in this subsection—show how student veterans inherently possess unique degree attainment challenges.

One reason why student veterans are a unique subgroup is the use of GI Bill entitlements in financing postsecondary education. In 2016, each student using Post-9/11 GI Bill funds received approximately \$14,000, while each student using Title IV funds received roughly \$10,250. While those comparisons do not show a significant difference, in aggregate, the contrast is stark when four percent of the total student population receives ten percent of the federal funding allocated for postsecondary education (ed.gov, 2017; Holian & Adam, 2020; Phillips & Lincoln, 2017; Worley, 2017). While student veterans are unique in how they finance college, performance analysis indicates student veterans attain a degree or certification at the same rate as other college students, which is between 55-60 percent (Callahan & Jarrat, 2014; NVEST, 2017; U.S. Dept of Education, National, 2020). The additional funding would suggest an improved attainment rate over other student populations, but unique challenges seem to limit student veterans.

One of the challenges student veterans have is socially connecting with traditional students—even though they desire that connection (Borsari et al., 2017). One noticeable difference includes age, where 80 percent of student veterans are over 24 years of age when they enter post-secondary institutions (Holian & Adam, 2020; NVEST, 2017, p. 3). An even starker difference is 21 percent of the Post-9/11 GI Bill users are 35 years or older (Mann, 2017, para. 9). Nearly half of the student veteran population (47 percent) is married with children, and 15 percent are single parents (Borsari et al., 2017, p. 167). Student veterans are more likely to be first-generation students compared to traditional students (Bailey et al., 2019). Undergraduate student veterans are more than twice as likely to be male students compared to non-military undergraduates, who are 35 percent male (Dobson et al., 2019, p. 3).

An additional reason for student veterans feeling awkward in traditional settings is the combat or combat support roles they participated in and the military structure they left behind. The younger civilian student population has a difficult time understanding those experiences and often shows ignorance of the military (Barry et al., 2014; Borsari et al., 2017). Because nearly

three-quarters of the nation's 17 to 24-year-olds would not qualify for military service, when traditional students misrepresent military service, student veteran perceptions of being an outsider are exacerbated (Spoehr & Handy, 2018). The inability to connect with traditional students leaves student veterans feeling uncomfortable and helps explain their unique challenges.

Another reason for student veterans feeling uncomfortable on campuses is their time away from a formal educational environment. While all active-duty service members receive counseling before departing the military, studies suggest the assistance received does not adequately prepare the member for the transition to postsecondary education (Faurer et al., 2014; Kato et al., 2016). A possible reason for the lack of adequate counseling is the military annually transitions 200,000 active duty and 800,000 reserve component service members out of the military (Kamarck, 2018). The numbers of transitions suggest a lack of personalized services, although that is what was called for by the Veterans Opportunity to Work (VOW) Act of 2011 (New GPS Program, 2018).

Student veterans who feel unprepared for higher education should seek assistance from the faculty and staff on the campus they attend (Gregg et al., 2016). Yet, student veteran experiences are often misunderstood by faculty and staff regardless of the level of respect student veterans are shown (Barnard-Brak et al., 2011; Barry et al., 2014; Borsari et al., 2017; Canto et al., 2015). Faculty and staff want to provide a supportive campus for student veterans, and studies have found their support is critically important in assisting the members in their transition from the military culture to the higher-education culture. Student veterans are generally not good at self-identifying problems, and faculty and staff lack the knowledge needed to provide a comfortable setting for student veterans; thus, many studies suggest training for campus faculty and staff, so their understanding of the institution's student veteran population improves (Albright & Bryan, 2018; Alschuler & Yarab, 2018; Andrewartha & Harvey, 2019; Graf et al., 2015; Kinney & Eakman, 2017; Lim et al., 2018; Osborne, 2014). The difficulty student veterans have

with feeling comfortable in traditional settings may explain why 40 percent of student veterans take college-level classes online (Zoli et al., 2015, iii).

Campus Diversity

Determining ways to assist student veterans to feel included on the campuses they attend is a benefit to institutions. Researchers have long called for higher education institutions to have a diverse setting where students get to interact with a wide range of opinions and cultures. For example, Matthew Mayhew, lead author for the third edition of *How Colleges Affect Students* (Mayhew et al., 2016), discussed the importance of diverse campuses during his 2018 Kamm Lecture at Oklahoma State University. Mayhew (2018) argued that diversity education needs to be “thoughtfully threaded” through a four-year program instead of relegated to a single course. Responding to a follow-up question on how a campus would institute a four-year diversity curriculum, Mayhew stated campuses need a “culture of diversity” (Mayhew, 2018). Including student veterans in campus diversity actions likely improves an institution's culture of diversity.

Since the end of World War II, the military was a pioneer in racial diversity for this nation, not for altruistic purposes but because of need. Based on the national response to World War II, President Truman signed an Executive Order in 1948 ordering equality for all service members regardless of “race, color, religion, or national origin” (Dunivin, 1994, p. 538). Another defining moment leading to increased diversity in the military was the abolishment of the draft in 1973. As an all-volunteer force, the military would fail if it solely relied on white males to fill and accomplish the wide variety of military jobs and duties (Abrams, 1989). Truman's order, the end of conscripted services, and other mandates have led to an adapting military considered the most diverse organization in the United States (Atuel and Castro, 2018; Yamada et al., 2013).

The current generation of student veterans is more diverse than any other group of previous military veterans. To highlight the diversity, more student veterans are first-generation students compared to all other student groups (Fernandez et al., 2019; SECond Mission, 2018). Nearly half of the student veteran undergraduate population is non-white (Holian & Adam, 2020).

Campuses should consider student veterans a minority group and, as with other minority groups, value their perspectives in the classroom (Dobson et al., 2019; Karp & Klempin, 2016; Rumann & Hamrick, 2009). Because nonmilitary faculty, staff, and students are unlikely to understand student veterans' military experiences, many of the subgroup's members identify as marginalized individuals (SECond Mission, 2018; Wooten & Condis, 2018). The need to recognize student veterans as a minority group, regardless of race, within a multicultural campus provides support for the group's members. Multicultural schools do an excellent job of encouraging identity development, which is an area of need for student veterans who go through an identity transformation during their college experience (Jones, 2013; Kirchner, 2015; Phillips & Lincoln, 2017). As student veterans experience an identity change, they want recognition of their military service at the same time desiring to “assimilate and develop an identity as a 'typical' college student” (Borsari et al., 2017, p. 168; Canto et al., 2015). Like another minority group—LGBQ females—student veterans are more likely to leave college when they feel their faculty or peer students do not value their military experience (Fernandez et al., 2019).

The racial diversity of the military far exceeds that found on college campuses (Ledesma, 2017). Racially diverse, 30 percent of student veterans are persons of color (SECond Mission, 2018). Today's student veterans come from an environment that prizes the tenets of “respect, honor, and trust,” further supporting a culture of diversity (Phillips & Lincoln, 2017, p. 663). For institutions that can find ways to allow student veterans to feel comfortable, they, in turn, could assist in improving a campus's diversity culture through daily actions instilled during their military service (Schein, 2004). Higher education could strengthen its mission of educating a multicultural student body by embracing students who come from a culture where the integration of race, gender, and origin are the norm (Ledesma, 2017; Romero et al., 2015).

Campus Services

Successful integration of student veterans into a campus should positively influence an institution's acceptance of multicultural views. Further, studies find other campus constituents

seem to benefit from perspectives student veterans bring to college (Albright & Bryan, 2018; Heineman, 2016). While some researchers have stated the unique subgroup requires equally unique campus support services, studies do not agree on what services student veterans need (Cruise & Misawa, 2019; Moon & Schma, 2011). The last decade's five major theories and empirical research in student veteran studies provide a way to group the various support services researchers have found to assist student veterans.

Adult studies found all student populations seem to benefit on military-friendly campuses where the perspectives of student veterans are accepted (Albright & Bryan, 2018; Heineman, 2016). Disability-related studies found that campuses with counseling services best support student veterans to assist with mental and psychological combat wounds along with other standard student support services (Cate, 2011; Canto et al., 2015; Eakman et al., 2016; Elliott et al., 2011). Some adaptation studies found veterans-only learning communities and classrooms could be beneficial (Elliott et al., 2011; Schiavone and Gentry, 2014; Semer and Harmening, 2015). Generally, adaptation studies found campuses best support student veterans with a centralized, single office that provides focused veteran services (Bergman et al., 2014; Green Beauchamp, 2015; Kato et al., 2016).

Transition studies did not provide a specific service but found that without campus support, student veterans are likely to fail in their degree or certificate attainment attempt (Brown & Gross, 2011; Elliot, 2015; Lim et al., 2018). Identity studies found that student veterans often feel like outsiders in college campus settings (Bergman & Herd, 2017; Borsari et al., 2017; Canto et al., 2015; Herman & Yarwood, 2014; Jenner, 2017; Jones, 2013; Kirchner, 2015; Lim et al., 2018; Meiners, 2019; Southwell et al., 2018). When coupled with studies on student veteran diversity, the findings suggest campuses should provide services typically reserved for other marginalized, minority student populations (Dobson et al., 2019; Jones, 2013; Karp & Klempin, 2016; Rumann & Hamrick, 2009).

The majority of reviewed studies recommended broad campus services and military veteran-specific training for campus faculty and staff (Albright & Bryan, 2018; Brown & Gross, 2011; Dillard & Yu, 2016; Green Beauchamp, 2015; Moon & Schma, 2011; Ward, 2019; Zoli et al., 2015; Jenner, 2017). Financially, the recommendation of comprehensive services will appeal to many campuses, which cannot provide student veteran-specific support services to focus solely on four percent of their student population (Holian & Adam, 2020; Karp & Klempin, 2016). Even if an institution has an office dedicated to assisting student veterans, a coordinated effort is necessary to make a campus friendly to student veterans (Dillard & Yu, 2016).

Generally, higher education has a difficult time supporting nontraditional students (Remenick, 2019); however, many studies have found the impact on other student groups as positive when campuses use a combination of services to support student veterans (Barnard-Brak et al., 2011; Bonar & Domenici, 2011; Brown & Gross, 2011; Ghosh & Fouad, 2016; Graf et al., 2015). Using existing campus services with trained and informed faculty and staff is a practical approach to providing support to student veterans; thus, the next subsection will review studies on existing campus services to support student veterans in their attainment goals.

Existing Services

In 2014, the National Center for Education Statistics published results from a large-scale, national study on services provided to student veterans (Queen et al.). About 1,500 United States colleges and universities reported on their services for the nearly 850,000 undergraduate student veterans on their campuses. The AY 2012-2013 study did not recommend student veterans' services to campuses. The study only reported the percentage of United States institutions responding affirmatively to specific services listed on the survey. A majority of the institutions reported having these three particular services for student veterans: a designated point of contact for student veterans (82 percent), customized financial education benefits information (79 percent), and awarded academic credit for military service (67 percent) (p. 2). A minority of responding colleges and universities (fewer than 50 percent) reported having the remaining list of

services specific to student veterans: enrollment services, including recruiting events specifically for military-affiliated students, and orientation programs for student veterans; health services included mental health counseling, off-campus referrals to medical and counseling services, student veteran group counseling, and a dedicated social space for student veterans. Non-academic services included employment assistance, a veteran's student organization, financial aid counseling, assistance with enrolling in VA education benefits, and training for faculty and staff. Academic services included mentors or advisers who were former military members, student veteran peer mentoring, academic advising, career planning, academic tutoring, and study skills workshops (Queen et al., 2014).

In terms of academic success, students who used academic support are four times more likely to graduate than those who did not (Huang et al., 2017). Studies found that due to their time away from formal education and being only average high school students before their military experience, student veterans needed more academic support than other student populations (Bailey et al., 2019; Karp & Klempin, 2016; NVEST, 2017). Four primary services student veterans needed were veteran benefits-focused services, academic policies and practices, campus-wide non-academic services, and career advising (Karp and Klempin, 2016). Academic advising and other support services tend to lump student veterans with other student populations (Remenick, 2019). Student veteran researchers called for additional staff to support the unique needs of student veterans—but acknowledge cost issues often outweigh the benefits. Typically, campuses provided enough student veteran staff members to ensure compliance but not enough that holistic support was provided (Karp & Klempin, 2016).

Improved academic advising and counseling services are likely to benefit other student groups (Ghosh & Fouad, 2016; Remenick, 2019). An example of how improving academic advising for student veterans assists other students occurs when campuses accept prior learning assessments (PLA). The American Council on Education (ACE) defines PLA as “gained outside the college classroom in a variety of settings and through formal and non-formal means” (Adult

Learners Guide, 2018, para. 1). The ACE Military Guide has evaluated all military training since 1954 to determine PLA credit for service members (Military Guide, 2018). The Council for Adult & Experiential Learning (CAEL) trains faculty and academic advisors to evaluate civilian PLA. When campuses accept PLA standards, academic advisors could assist student veterans in their attainment goals by using the ACE Military Guide to award academic credit. The same advisors who award credit for the learning student veterans accumulate during their military career could assist other student groups—particularly adult students—who might also benefit from the PLA credits (Bergman et al., 2014).

A study headed by CAEL found students with PLA are more likely to persist and attain their degree or certificate than students who do not have PLA (Klein-Collins & Hudson, 2018). The study found that 83 percent of students with PLA completed their baccalaureate degree after seven years, while students without PLA completed at a 68 percent rate (p. 6). Providing PLA academic advising for student veterans will likely benefit other adult students, which currently comprise 33 percent of the postsecondary student population (Bergman & Herd, 2017, p. 79). Studies show about half of higher education institutions accept PLA credit (McBain et al., 2012). Providing improved PLA services to student veterans could be a way to assist many subgroups on a campus (Bergman & Herd, 2017; Ghosh et al., 2019; U.S. Dept of Education, 2020).

Many studies have found student veterans need additional assistance to attain their academic goals. Previous research on student veteran support uses small qualitative data sets or large quantitative data sets collected from a centralized office such as an institutional registrar or IPEDS. This researcher looked for a study that asked student veterans who have successfully navigated a higher education institution what campus support services were most beneficial to their success. This researcher has not found any studies that collect a large enough quantitative set of data directly from student veterans that is generalizable.

Predicting Attainment Success

The Post-9/11 GI Bill is an investment of federal funds to military veterans seeking post-secondary education. The funding rewards military service while improving the nation's economy through veterans securing a postsecondary education in their transition into a civilian career. Federal involvement in higher education, stemming from the 2009 GI Bill, seeks to improve student veteran degree or certificate attainment. An example of the nation's desire to improve degree attainment for student veterans is found in the “8 Keys to Veterans' Success” document. The report was collaboratively produced in 2012 by multiple United States federal agencies, non-government agencies, and student veterans' groups and was provided to colleges and universities in 2013. The document suggests support methods for student veterans' attainment goals who are “transitioning to higher education, completing their college programs, and obtaining career-ready skills” (U.S. Dept. of Education, 2020). This subsection will review the best method for predicting attainment success to improve understanding of how to support student veterans in their attainment goals.

Studies predicting collegiate success have usually presented a binary argument between high school GPA and standardized tests such as the SAT or ACT (Chingos, 2018; Harackiewicz et al., 2002; Radunzel & Noble, 2012). These two measurements are often lumped together under the heading “Academic Preparedness.” Academic preparedness is the method selective institutions use in student acceptance and is considered the standard for predicting attainment success (Ledesma, 2017).

There is a problem with using academic preparedness scores for student veterans. Academic preparedness scores were designed to assess a traditional student's readiness for college, not adult students who have been away from formal education for an average of six years (Bergman & Herd, 2017). Additionally, many military service members volunteered for the military because they were not ready for college when they finished high school (Bailey et al., 2019). Another reason for not using academic preparedness as a predictor is two-thirds of student

veterans are first-generation students who are likely underprepared for college (Lim et al., 2019; SECond Mission, 2018). As first-generation students, student veterans are less likely to get the college preparation they need through self-advocating efforts (Kinney & Eakman, 2017). Higher-education institutions will likely continue to use academic preparedness measurements for accepting traditional students; however, academic preparedness is a poor predictor for the attainment success of student veterans.

Further, some researchers find academic preparedness as a flawed predictor of collegiate success. Despite campus efforts to support students with tutoring, counseling, and stress management areas, less than half of the entering freshmen attain a bachelor's degree in six years (Beattie et al., 2018; Williams et al., 2018). A good high school student does not necessarily make a good college student. Academic preparedness measurements do indicate a student's potential for completing college, but a better predictor for college completion could be first-year success.

Compared to college preparedness, using first-year success to predict college success is a relatively new method that may align with the rising adult student population in United States colleges and universities since the 1990s (Harackiewicz et al., 2002; Klein-Collins & Hudson, 2018; Merriam, 2001; Remenick, 2019). Comparisons between first-year success and academic preparedness seem to indicate first-year success is a better predictor of college attainment (Beattie et al., 2018; Chingos, 2018; Koch et al., 2018; Radunzel & Noble, 2012; van der Zanden et al., 2019). Students' personalities seem to determine success in the first year. Some of those personality traits include study skills, motivation, and social relationships (van der Zanden et al., 2019). Other displayed personality traits that indicate collegiate success, such as organization, hard work, and persistence, are part of the military culture from which student veterans come (Beattie et al., 2018). The majority of student veterans should have those traits firmly established upon beginning college coursework. First-year success appears to be a better predictor of attainment for student veterans than academic preparedness.

First-Year Success for Student Veterans

Although student veterans come from a culture that instills the traits some studies find important in collegiate success, members drop out at about the same rates as other student groups (Cancio, 2018; Jenner, 2017). Unlike most other student groups, student veterans rarely drop out due to financial reasons. Some research indicates academic support to student veterans—particularly in the first year—is crucial to the subgroup's persistence (Andrewartha & Harvey, 2019). While student-veteran research has substantially increased over the past decade, why most student veterans drop out is not really understood (Alschuler & Yarab, 2018). Because first-year success is the best predictor for student veteran degree or certificate attainment, the support received during the first year of collegiate studies could be the key to improving success rates.

The past decade's research suggests having the right campus services is vital for student veterans to persist and attain their program's degree or certificate. The previous Campus Services and Existing Services subsections covered many of the recommended supporting services. Some of the recommendations include counseling and medical services capable of dealing with the disabilities many student veterans have, a centralized office specializing in military benefits, academic advising capable of understanding military veteran experience, awarding credit based on that experience, and campus faculty and staff trained to understand the unique differences of the student-veteran subgroup.

Additional services to support student veterans recommended over the past decade include veterans' recreational activities, organizations, and clubs (Alschuler & Yarab, 2018; Gati, Ryzhik, & Vertsberger, 2013; Jenner, 2017; Southwell et al., 2018). Some studies recommended encouraging student veterans to be proactive in seeking out faculty and academic advisors (Andrewartha & Harvey, 2019; Beattie et al., 2018; Huang et al., 2017; Pellegrino & Hoggan, 2015; Southwell et al., 2018). Other studies recommended mandatory academic advising (Capstick et al., 2019; Koch et al., 2018). Still, other studies recommended a veterans-only first-

year seminar or other forms of ongoing, first-year support (Andrewartha & Harvey, 2019; Dillard & Yu, 2016).

Defining first-year success can be accomplished using different measurements. Some studies suggest using difficult-to-measure standards such as student comfort level, student satisfaction, and feelings of affirmation (Karp & Klempin, 2016; Kuh et al., 2011). Without a doubt, a sense of comfort, satisfaction, and belonging seems essential to the success of all students. While these factors are important to the attainment success of students, measuring them would prove very difficult. This study seeks a more standard definition of success with a less complicated method of measurement. Thankfully, all postsecondary institutions receiving Title IV funds routinely categorize undergraduate students according to the U.S. Department of Education's standard measurement for retention rates (U.S. Dept. of Education, 2020). This study relies on the standard to define success in the first year as passing 30 or more credit hours as a full- or part-time student at the same institution.

Conclusion

Since the end of World War II, United States taxpayers have financially invested significant amounts of money in assisting military veterans in earning a postsecondary degree or certificate and transitioning into a productive civilian career. Twentieth-century investment success and perhaps a twenty-first-century acknowledgment of the importance of a college degree on “economic self-sufficiency and responsible citizenship” has led to additional investments over the past decade (Kuh et al., 2008, p. 540). The collegiate success of student veterans is good for the nation they served and for the campuses they attend. Studies suggest student veterans increase campus diversity, improve multicultural understanding, and positively influence campus support services for all other student groups.

Over the past decade, researchers have found student veterans need campus support for successful attainment; however, there are few indications of what unique support is needed or what common campus offices are important to the success of student veterans. Additionally, no

large-scale studies sought student veteran input on what services were most important to their success. Studies also suggest the importance of the first year as a predictor for attainment success. This literature review indicates that a large-scale study seeking input from student veterans on what campus services were most important to their first-year success would be beneficial. Chapter Three, Methodology, presents how this study collected student veteran input about the importance of campus services.

CHAPTER III

METHODOLOGY

As presented in the previous Review of Literature, research on student veterans has increased in the past few years, particularly following the Post-9/11 GI Bill of 2009. The majority of these studies focus on student veterans' needs in on-campus settings. Numerous studies agree that first-year success at college is the best predictor of degree or certificate completion (Beattie et al., 2018; Chingos, 2018; Koch et al., 2018; Radunzel and Noble, 2012; van der Zanden et al., 2019). However, previous research does not show a quantifiable dataset of student veterans' perspectives on what services are most important to first-year success (Velez et al., 2020). This study will assist higher education leaders by clarifying what services are important to first-year student veterans' success.

A primary research question guided this study: what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? For this research, first-year success is completing 30 credit hours. In response to the research question, the study collected data from student veterans using an indirect data collection method, a survey, which allowed for quantitative analysis of student veterans' perceptions about 22 campus services previous studies deemed important to the population. The study conducted a weighted mean calculation on the selection of importance for each of the 22 services to quantify the importance of each service. Following the quantification, the study conducted a Chi-square test for goodness of fit to determine if any of the participant selections were significant.

Additional information of interest to the field of student veteran research was the collected biographical data. Information such as military rank, service branch, combat deployments, age, sex (male or female), and preference in educational settings adds to the knowledge about the student veteran population. The biographical data enriches the study's results and allows the study to have confidence in the validity of the results. This chapter outlines the general perspective, research context, participants, data collection instruments, data collection procedures, and data analysis (Joyner et al., 2018).

Chapter Roadmap

The Methods chapter begins with the general perspective, then summarizes the research context, and then provides a discussion on research participants, which includes how the study obtained the sample and the study's sample size goal. The chapter then discusses the survey instrument used to collect data with a summary of the instrument's design, then explains the instrument using the survey's three sections, participant screening, campus service ratings, and biographical results. The chapter then explains the procedures used to collect the data, analysis of the data, and closes with a summation of the chapter.

The General Perspective

The epistemological stance of this study is post-positivism, where the belief that understanding the truth of an event is a conjecture on the part of the event's participants as well as the investigator who defines the event (Lindlof & Taylor, 2017). Post-positivism is an appropriate stance to respond to the research question because participants were given a set of choices to provide a conjecture on their first-year collegiate experiences. The collection of conjectures provides a meta-perspective on what campus services were important to the first-year success of the participating student veterans. The researcher shared the study's results, the meta-perspective, with the institutional offices that assisted in collecting data and asked the offices to share the results with the student veterans on their campuses (Appendix G, Summation of Results to Assisting Campuses). This sharing effort attempted to empower the collaborating participants and

their institution's office by improving the understanding of what campus services were important to the success of first-year student veterans. Empowering participants is another hallmark of post-positivism (Tekin & Kotaman, 2013).

Determining the correct research lens is important (Stage & Manning, 2015). This study's literature review suggested the student veteran's first year in college is likely the most difficult. The individual must rapidly negotiate a non-military, bureaucratic organization with little or no centralized assistance and try to assimilate into the organization that is often foreign to the individual's military identity (Jones, 2013; Kirchner, 2015; Phillips & Lincoln, 2017). Each student veteran must learn the nuances of receiving unique, earned entitlements, often without a campus office specializing in military benefits. For those reasons, a transitional perspective appeared beneficial to understanding campus support services critical to a student veteran's first year of college. The lens that informed the research of student veterans' first-year success was Schlossberg's Transition Theory.

Schlossberg's Theory informed the study by acknowledging that student veterans must successfully navigate a transition from the military into higher education institutions to attain their desired postsecondary degree or certification. Literature informing this study showed the first year of collegiate studies is considered the most difficult for all students (Harackiewicz et al., 2002; Klein-Collins & Hudson, 2018; Merriam, 2001; Remenick, 2019). When students complete their first year of collegiate studies, their transition is successful because they are more likely to complete their degree or certificate (Beattie et al., 2018; Chingos, 2018; Koch et al., 2018; Radunzel & Noble, 2012; van der Zanden et al., 2019). Schlossberg's theoretical construct includes using 4S's (*situation, self, support, and strategy*) to categorize influences upon a person experiencing transition.

Schlossberg's theoretical construct proved to be a useful tool in relaying this study's Implications for Practice subsection in the Summary and Discussion Chapter. This study's *situation* is the first year of collegiate studies for sampled student veterans in a single state that

includes public and private higher education institutions. Campuses can provide services that improve a student veteran's *self* or what attributes the student has to successfully transition into postsecondary education. Participants rated the services that campuses could use to *support* student veterans. The fourth S in Schlossberg's model is *strategy*, which is the study's suggestion to campuses following the analysis of results (Chickering & Schlossberg, 1995; Schlossberg et al., 1995).

Research Context

The study's research design was new. In an attempt to limit the number of factors that could overly complicate the design, data collection occurred during the spring semester of the 2021 Academic Year within a single Midwestern state. This cross-sectional survey method of data collection allowed for data analysis of multiple campus services. The survey was distributed to potential participants within the state using previously organized communication links for student veterans. The survey had the potential to be distributed to most of the state's current student veterans pursuing higher education degrees or certifications in the state's public and private colleges and universities.

Research Participants

Research participants were current student veterans. A current student veteran is a person who has served or is currently serving in one of the United States military organizations in an active duty, guard, or reserve role and has participated in a postsecondary course within the previous year. The study relied on participants to self-identify whether they had participated in collegiate courses as student veterans.

Obtaining the Sample

Veterans' benefits coordinators at each of the state's higher education institutions were contacted in an attempt to get the survey to the desired participants. Because student veterans typically use unique federally funded educational entitlements, all institutions (research, regional, private, and two-year colleges or universities) with student veterans have at least one benefits

coordinator who ensures accurate reporting of the entitlements to the disbursing federal agencies. Coordinators must maintain an accurate contact list of their institution's student veterans to ensure their reports to federal agencies such as the U.S. Department of Veterans Administration (VA) and the U.S. Department of Defense (DoD) comply with agency standards. Because of this contact list, veterans' benefits coordinators were the best points of contact to facilitate the distribution of this study's survey instrument.

The study's first action was to make contact with each of the veterans' benefits coordinators within the state. The study used each institution's website to determine the institution's benefits coordinator and the coordinator's office phone number. The study then called the coordinator's office phone to make initial contact, inform the coordinator about the research, and state the results would be distributed to each participating coordinator (Appendix B, Script of Initial Phone Call to Certifying Officials). Within 30 minutes of the phone contact's end, the study sent the coordinator an email containing specific information about the research so the coordinator and his/her institutional leadership could make a determination if they would participate or not (Appendix C, Initial Email to Possible Assisting HEIs). Once the contacted coordinator informed the study of the institution's willingness to participate, the study sent an email to the coordinator that was designed to be forwarded to the institution's student veterans (Appendix D, Initial Email to Potential Participants).

Knowing that reminders would go out to the study's population of potential participants, the survey was designed to prevent participants from filling out the survey more than once. Within the Qualtrics survey, the "Prevent Ballot Box Stuffing" feature was selected, meaning an IP address could only respond to the survey one time. Because participants could take the survey on another machine/IP address, the survey's Consent Form asked potential participants to "only participate in this survey one time as multiple responses from the same individual will skew the results" (Appendix F, Survey Instrument).

Determining Sample Size

The study's first step in determining the sample size was to understand the population size. Previous studies have found that student veterans account for about four percent of all postsecondary students (Bonar and Domenici, 2011; Holian and Adam, 2020; Radford et al., 2016; Zoli et al., 2015). In 2017, four percent of the fall enrollment in the state where the study was conducted was 8,000 (Oklahoma State Regents, 2017). This finding aligns with the approximate number of student veterans using educational entitlements in the same year (National Center for Veterans Analysis and Statistics, 2020; U.S. Department of Veterans Affairs, 2020). Thus, the study assumed there were 8,000 student veterans in the Midwestern state where the study was conducted.

While the assumption of the population appears to be sound, the study did not find any mathematical models for determining the minimum sample size for the planned Chi-square test. Instead of setting a minimum number of participants, the study sought to collect as many samples as possible so outlier responses would have less influence on the results. Based on the primary researcher's experience with conducting surveys on the campus where he works, the initial goal was to sample twenty-five percent of the population. Thus, the study sought to have 2,000 student veterans respond. A discussion on why this goal proved to be an unrealistic expectation can be found in Chapter Five's Summary section.

The survey was opened by 381 potential participants and, following the screening questions, collected 285 responses to the study's primary question, where the Chi-square test was used to analyze results. The number of participants proved sufficient for producing delineated results. The 282 student veterans who responded to the survey's biographical information section appear to accurately reflect the population's known characteristics, leading the study to believe the sample collected was valid. Chapter Four's discussion of Section 3, Biographical Data, Q7 - Q16, provides a more detailed explanation for why the study's collected sample appears to be an accurate representation of the population.

Instrument for Data Collection

The instrument used to collect data was an email distributed to potential participants that contained an electronically linked survey (Appendix D, Initial Email to Potential Participants). The study's researcher routinely designs and distributes surveys to faculty, staff, and students in a university setting and is comfortable with this data collection system. The survey's instrument was drafted using current design practices and standards. See the Survey Design subsection of this chapter for a detailed explanation of the instrument's contents.

The study used four separate opportunities to refine the data collection instrument. These opportunities ensured the survey instrument was adequately vetted before it was used to collect data. The first opportunity was with the dissertation's methodology committee member. The second was with the researcher's dissertation committee. The third was with the Oklahoma State University's IRB, and the fourth was a pilot test with the student veterans on the campus where the primary researcher works. For a comprehensive explanation of this process, see the Proposed Procedures for Data Collection section in this chapter.

Survey Design

The survey was designed to respond to the study's research question, what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? One of the survey's sixteen questions collected responses to answer the research question. The other questions were asked to ensure the responses to the one primary question were valid. The survey opened with a Consent Form followed by three sections, Participant Screening, Campus Services Ratings, and Biographical Information. The following explanation of the survey's design specifies each question's placement in the survey using a capital letter Q, followed by a number to represent the survey question's order.

Upon reading the Consent Form, the survey asked the potential participant to select "Yes, I consent" or "No, I do not consent." If the "Yes" option was selected, the potential participant

was moved to the Participant Screening section. If the “No” option was selected, the survey thanked the potential participant and closed the survey.

Participant Screening, Section 1

For potential participants who chose to consent to the study, the Participant Screening section had three successive questions to determine whether the potential participant's responses were desired or not. Each question forced a response, meaning the participant was not allowed to proceed unless a response was provided. Following the three screening questions, the section had one additional question, giving the Participant Screening section a total of four questions.

The section's first question (Q1) asked the potential participant if s/he has served in the military. Respondents who selected “Yes,” moved to question two. Respondents who selected “No,” received an automated thank you message that closed the survey. The section's second question (Q2) asked if the potential participant was currently enrolled (within one year) in any college courses. Again, “Yes” responses moved the respondent to the next question, while “No” responses received an automated thank you and were removed from the survey.

Question three (Q3) asked potential participants to estimate the number of college coursework completed since military service began. The study needed to know how many participants had successfully navigated their first year of collegiate studies. Thus two responses determined where the potential participant was in relation to the 30 credit hours used to determine the first year. A third response was offered because some of the potential participants may not have taken any college courses since their military service. The three choices were “Fewer than 30 credit hours,” “More than 30 credit hours,” or “None-all college courses taken before military service.” Potential participants selecting either the “Fewer than 30 credit hours” or the “More than 30 credit hours” responses passed the three screening questions and were allowed to move through the remainder of the survey. Because this study wanted responses from students taking college courses after their military service began, respondents who selected “None-all college courses taken before military service” were removed from the survey.

The last question for Section 1 (Q4) asked participants the number of hours they completed, including the hours earned before military service. Response options were, “Fewer than 30 college credit hours completed,” “30 to 59 college credit hours completed,” “60 to 89 college credit hours completed,” “90 or more college credit hours completed,” “College graduate / Baccalaureate degree completed,” and “Graduate student.” These responses allow the categorization of participants in a collegiate model that parties interested in this study’s results will understand.

Campus Services Rating, Section 2

Once participants completed Section 1, they moved to the survey's most important question (Q5), where they rated twenty-two campus services using a six-point Likert Scale. In this section, participants were asked to rate the importance each listed campus service had in their first year of college following the beginning of their military service. Respondents had six selections for each of the twenty-two listed campus services. The six possible selections were 1 = extremely important, 2 = important, 3 = slightly important, 4 = not important at all, 5 = did not use service, and 6 = does not apply / service was not available. The survey's design forced responses to each of the twenty-two services before allowing the participant to move to the survey’s sixth question.

Determining which services were included began by collecting all of the services related to student veterans' academic achievement in the study’s Review of Literature. Studies specifying services related to academic achievement include Andrewartha and Harvey (2019), Baker (2013), Bergman et al. (2014), Capstick et al. (2019), Dillard and Yu (2016), Eakman et al. (2016), Karp and Klempin (2016), Mayhew (2018), National Veterans Ed Success Tracker (2017), Pellegrino and Hoggan (2015), Phillips and Lincoln (2017), Semer and Harmening (2015), Southwell et al. (2018), and Williams et al. (2018). Following the collection of services, two national, comprehensive studies on student veterans published by federal departments were used to refine the list by aligning the naming of various services with pre-established standards. The first

national study is titled “Services and Support Programs for Military Service Members and Veterans at Postsecondary Institutions” by Queen et al. (2014). The second national study is the “Eight Keys to Facilitating Veterans' Success on Campus” by the U.S. Departments of Education, Veterans Affairs, Defense, and Labor (2013).

The order that the twenty-two listed campus services were listed was a loose grouping by type. The first service on the list was “Admissions/Enrollment assistance.” The second through eighth services were academically related services: “Academic credit for military service,” “Academic advising,” “Academic tutoring/support,” “Study skills workshops/assistance,” “Clear academic policies and practices,” “Veterans-only orientation/classroom,” and “Student veterans' peer-to-peer mentoring.” The ninth through eleventh services asked about campus staff and faculty perceptions: “Faculty who understand military veterans,” “Staff who understand military veterans,” and “Advisors/mentors who are military veterans.”

The twelfth through fourteenth services asked about campus spaces for veterans: “An office designated to support student veterans,” “Student veterans organization/club,” and “Dedicated social space for student veterans.” The fifteenth through nineteenth services asked about economic-related services: “Assistance with VA educational benefits,” “Assistance with non-educational VA benefits,” “Assistance with financial aid benefits,” “Employment assistance,” and “Career-planning assistance.” The twentieth service was “Internet/computer assistance.” The final two services dealt with the combat-related wounds associated with student veterans, “Counseling services capable of dealing with veterans' issues,” and “Medical services capable of dealing with veterans' issues.”

Because of a possibility that some participants did not find a service they felt was important in the survey's list, the survey followed the rating question (Q5) with a write-in question. The write-in question (Q6) asked participants to provide any campus service(s) not listed in the survey they felt were important to their academic success during the first year of college after military service. While Question Six's written responses cannot be included in the

quantitative analysis portion of the study, responses are presented and discussed in Chapter Four, Analysis of Data. The qualitative responses allowed the study to understand if the twenty-two campus services provided were comprehensive and could be useful in future studies that seek to identify campus services student veterans believe are important to their academic success.

Biographical Information, Section 3

The final section of the survey asked participants to provide additional biographical information in the form of ten questions. The selection of the ten questions was primarily derived from previous student veterans' studies, meaning the results in this section will likely be of interest to other student veteran researchers. Additionally, the biographical information informed the study as to whether the collected data was a valid representation of what is known about the student veteran population.

The first biographical information question (Q7) asked participants to select their branch of service. The six branches were listed alphabetically: "U.S. Air Force," "U.S. Army," "U.S. Coast Guard," "U.S. Marine Corps," "U.S. Navy," and "U.S. Space Force." Respondents could select more than one branch. This question was asked because some student veteran studies find differences in service branches (Faurer et al., 2014; Young & Phillips, 2019). Additionally, within the Midwestern state where the study will be conducted, there are two Air Force bases, one Army base, a battalion-sized Air Force National Guard unit, and a brigade-sized Army National Guard unit. Given the substantial representation of Army and Air Force veterans in the state, a majority of the respondents will likely select either Air Force or Army as their branch of service.

The section's second question (Q8) asked participants to select their highest military rank. Responses were "Enlisted (E1-E4)," "Non-commissioned officer (E5-E6)," "Senior non-commissioned officer (E7-E9)," and—on the slim chance that officers in a graduate school participated—"Commissioned officer (O1-O3)" and "Field grade commissioned officer (O4-O6)" were also listed responses. Previous studies did not look into student veterans' military rank, so

this question was asked to begin a discussion on military ranks within the student-veteran field of study.

The third biographical information question (Q9) asked participants if their military service included any combat tours. Selections were “Yes” or “No.” This question was asked because previous studies showed a majority of student veterans have combat experience, allowing the study to have another measurement of the validity of the collected data. Additionally, the studies suggest differences between student veterans with combat tours versus those without combat tours (Barnard-Brak et al., 2011; Eakman et al., 2016; Kato et al., 2016; Southwell et al., 2018).

The fourth question in Section 3 (Q10) asked participants if they took college courses before their military service. Responses were “Yes” or “No.” This question is new to the field of student veterans studies, but it was asked to inform the study how many participants had experience with higher education before they assumed the identity of a military member. The participants who had previous higher education experience should have had an easier transition back into higher education than participants who did not have collegiate experience before the military service. Additionally, “Yes” responding participants should have a better understanding of campus services than veterans who did not take college courses before their military experience. Because the two groups had different experiences with college and military, the study felt the two groups could also have different importance ratings to the campus services.

The fifth question in Section 3 (Q11) asked participants to select the number of years following military service they began collegiate coursework. The first of six choices was “zero years, I began college coursework during military service.” The second choice was “within one year of completing military service.” The third choice, “one year after completing military service,” the fourth, “two to four years after completing military service,” the fifth, “five to ten years after completing military service,” and the sixth choice was “greater than ten years after military service.” This question was asked to determine the participant's *situation* as it relates to

Schlossberg's Transition Theory (Chickering & Schlossberg, 1995; Schlossberg et al., 1995).

Based on the assumption that most student veterans served in the military to receive educational benefits, a higher percentage of responses from the first four selections, “0 years,” “< 1 year,” “1 year,” and “2-4 years,” was anticipated (Olt, 2018; Zoli et al., 2015).

The sixth biographical information question (Q12) asked participants to select their age. The six selections were “18-19 years of age,” “20-29,” “30-39,” “40-49,” “50-59,” and “60 years old or more.” This question was asked because student veterans are considered a subgroup of the adult student population (Phillips & Lincoln, 2017; Romero et al., 2015). Knowing the age range of student veterans participating in the survey could bolster the study's credibility if the responses' mean score shows a decidedly adult sample. The median and mode further contextualize the responses. Based on previous studies, the study anticipated the 30-40 years old age group to have the highest percentage of responses (Dobson et al., 2019).

The seventh biographical information question (Q13) asked participants to select their sex. The term *sex* is used by the 2020 U.S. Census in lieu of the more ambiguous term, *gender*. The two choices were “Male” or “Female.” Identifying military members by sex is very close to breaking cultural norms within the military community; however, because numerous studies try to mitigate the specific difficulties female veterans have as students and call for additional data on female student veterans, the survey asked participants to identify their sex (Albright et al., 2019; Schiavone & Gentry, 2014; Southwell et al. 2018). Based on previous studies, the percentage of respondents who select “Female” should be approximately 25 percent (Bonar & Domenici, 2011; Elliot, 2015).

The eighth question in Section 3 (Q14) asked participants to select their preferred mode of collegiate coursework. The four choices were “In-person classes,” “Online classes,” “Blended classes (a mix of online and in-person),” and “Competency-based classes (allowing students to complete courses on their own timeline).” Respondents could select more than one option to this question. This question was asked because student veteran research indicates the subgroup tends

to prefer online courses to traditional settings. Thus, a larger percentage of respondents selecting “Online” over the other modes was expected (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015).

The ninth question of the Biographical Information Section (Q15) asked participants if they were first-generation students. Choices were “Yes” or “No.” This question was asked because previous studies have found nearly two-thirds of student veterans are first-generation students (Fernandez et al., 2019; Karp & Klempin, 2016; Ledesma, 2017; SECond Mission, 2018). Based on those results, the study anticipated a majority of “Yes” responses to this question.

The tenth question of the Biographical Information Section and the final survey question (Q16) asked participants to classify the campus they were currently attending. The four choices provided were “Public, two-year degree (community college),” “Public, four-year degrees (regional or research university),” “Private college or university,” or “Unknown.” The responses to this question assisted the study in knowing whether an accurate cross-sectional sample from the Midwestern state where the survey was distributed was obtained.

Even though numerous student veteran studies include racial or ethnic identifications in their findings, this study does not include such identifying characteristics. The reason for excluding racial and ethnic identifications was the study’s desire to maintain the military’s cultural norms. Within the military community, members go out of their way to define other members by characteristics other than race or ethnicity. Members represent each other by rank, name, branch of service, branch within service, unit of assignment, awards, schools, and other military-related measurements. “We all wear green” is a common phrase in military communities, which is meant to encourage members to look past skin color and the origins of other members.

Because the study relies on a shared experience in the data collection phase, asking student veterans to provide survey responses that categorize participants by race or ethnicity potentially harms data collection. If asked, the desired participants are likely to distrust any claim of military identity by the study’s conductor. In support of this decision, a previous student

veteran study found no measurable statistical difference in responses by race or ethnicity (Holian & Adam, 2020). A copy of the survey instrument can be seen in Appendix F, Survey Instrument.

Procedures for Data Collection

The researcher's dissertation committee—and particularly the methodology committee member—helped refine the data collection instrument before the committee approved the instrument. Following the committee's approval, the researcher gained approval from the Oklahoma State University's Institutional Research Board (OSU IRB) on March 30, 2021. Following OSU IRB approval, the survey was pilot tested with student veterans at a single institution from April 5-9, 2021. The pilot test did not reveal any needed changes, so the survey instrument was distributed to 24 other institutions within the state from April 14 to June 1, 2021.

Distribution to student veterans through institutional benefits coordinators began with the researcher contacting 39 coordinators by phone. In the initial phone call, the researcher explained what the study was trying to accomplish and asked for the coordinator's assistance by forwarding an email to their student veteran distribution list (Appendix B, Script of Initial Phone Call to Certifying Officials). Within a few minutes of the phone call's ending, the researcher sent an email to the coordinator that reinforced the phone call's discussion, along with the OSU IRB Approval Letter, the survey's questions, and the proposed email to student veterans (See Appendices A, C, D, and F). Several coordinators immediately agreed to assist with the study by forwarding an email from the researcher to student veterans that contained a link to the survey. Most of the contacted coordinators had to get approval from higher-ranking institutional officers before agreeing to assist the study. Twenty-five institutions agreed to assist the study. Of the 14 institutions that did not assist, some of the coordinators responded to the researcher's email stating their institution declined to assist in the study, and others never responded to the researcher's initial email and follow-up emails.

Data collection highlights, by date, begin with the March 31, 2021 approval from the OSU IRB to begin collecting data. From April 5 to 9, a pilot test of the study's collection plan was

conducted at one university. From April 13 to 20, the researcher called the points of contact for student veterans at 39 Oklahoma colleges and universities. Most of the contacts were reached. For the contacts that did not answer, messages were left. Each call was followed by an email. The contents of the email can be seen in Appendices A, C, D, and F.

Of the 39 points of contact, three of the institutions stated they would not assist with the study. From April 14 to May 6, the 25 institutions that agreed to assist the study reported sending the study's survey link, via email, to their student veterans. On May 4, after at least three failed attempts to connect with an institution's point of contact, the researcher stopped trying to contact eight of the potential 39 institutions. On May 6, the last three institutions where contact was made but never agreed/responded to participate in the study were also removed from the further contact list.

In an effort to collect more samples, the researcher asked the 25 institutions that agreed to assist in sending a reminder email to their student veterans on May 6 and 17 (Appendix E). On May 18, the researcher asked the same institutions to send a three-minute video message from the researcher asking their student veterans to complete the survey (Dillman, 2021). The video received forty-three views. From May 18 to 27, the researcher asked four non-higher education organizations to assist with the study. One organization declined, and the other three never responded to requests. The survey instrument remained active from April 5 to June 1, 2021. On June 2, 2021, the researcher began analyzing the collected data.

Data Analysis

The biographical questions in Section 3 of the survey instrument were included to assist in the determination of whether the sample accurately represented the student veteran population. Assuming the sample was a good representation, Question 5 of the survey answered the study's research question—what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? The question asked respondents to rate the importance of twenty-two services. The importance of each service was

measured using a calculation of the weighted mean responses to the four importance ratings: *Extremely important, Important, Slightly important, and Not important*. Some of the participating student veterans either did not use the service or have the service available on their campus. Thus, two additional options were offered for each service, *Did not use* and *Not Available*. The two additional options allowed the study to deepen its understanding of each service.

The Chi-square test for goodness of fit was the inferential analysis used to generalize the population and determine if the results were significant (Gravetter & Wallnau, 2013). The test was an appropriate, nonparametric analysis because the research question's independent and dependent variables are both categorical. The independent variable was each campus service offered to students. The campus services were the different "treatments" offered to students, and the treatments were categorical. The dependent variable was how each participant felt about each of the campus services, translated into ratings. The test measured "how well the obtained sample proportions fit the population proportions specified by the null hypothesis" (Gravetter & Wallnau, 2013, p. 594).

There are two possible null hypotheses (H_0) for a Chi-square test: the equal proportions H_0 and the no-preference H_0 . When the population's proportions are unknown, the equal proportions null hypothesis (H_0) is appropriate; thus, this study used the equal proportions H_0 . Since there were four treatments, which were the four importance ratings, the proportion used in the Chi-square test calculation was 25 percent. The calculation for this study's Chi-square (χ^2) test was, $\chi^2 = \sum_4 (f_o - f_e)^2 \div f_e + \sum_3 (f_o - f_e)^2 \div f_e + \sum_2 (f_o - f_e)^2 \div f_e + \sum_1 (f_o - f_e)^2 \div f_e$.

In the calculation, f_o was the number of observed responses in each service's four treatments of importance. The f_o is always a whole number in a Chi-square test. The f_e was the expected frequency and was determined by multiplying the expected proportion (p) with the sample size (n) for each service ($f_e = pn$, or for this study, $f_e = (0.25)n$). Based on the degrees of freedom, χ^2 results 7.81 or higher are greater than the p-value of 0.05, rejecting the H_0 . Because

the twenty-two services selected for the study were identified as important in previous studies, the expectation was there would be few, if any, services that would retain the H_0 . The Chi-square test's calculation for this study was a seven-step process.

Step 1 was to state the null hypothesis (H_0). The H_0 for each service was that each of the four importance ratings (treatments) would have an equally distributed selection frequency. Thus, the expected frequency (f_e) of each service's four importance ratings was twenty-five percent of the sample. Step 2 was to obtain the sample. The survey instrument collected 285 sample responses from April 5 to June 1, 2021. Step 3 was to count the observed frequency (f_o). The study counted the number of sampled individuals in each of the four selections of importance for each treatment, which were the twenty-two campus services.

Step 4 was to compute the expected frequency (f_e). Because the H_0 stated an equal distribution of importance ratings, twenty-five percent of the sample for each service was determined using this equation: $f_e = (0.25)n$ where n is the sample size that rated one of the four importance options. Step 5 was to calculate the Chi-square statistic for each treatment. The study used the following calculation for each of the twenty-two campus services. χ^2 is the symbol for Chi-square, and \sum_x is the service's rating. $\chi^2 = \sum_4 (f_o - f_e)^2 \div f_e + \sum_3 (f_o - f_e)^2 \div f_e + \sum_2 (f_o - f_e)^2 \div f_e + \sum_1 (f_o - f_e)^2 \div f_e$.

Step 6 was to determine if the statistic was in the critical region. This study used the Chi-square Distribution Table found on page 711 of the Gravetter and Wallnau (2013) textbook. The degree of freedom (df) for this test was 3. Step 7 was to determine which of the 22 treatments (campus services) retained or rejected the H_0 . Using a level of significance of 95%, the critical region for a rejection of the H_0 begins with a χ^2 score of 7.81 or higher. The study anticipated most, if not all of the twenty-two services, to reject the H_0 because the services used in the survey instrument were considered important in previous student veteran-related studies.

The weighted mean calculation, the Importance Score, and the Chi-square test statistical analysis provided sufficient data to indicate what the sample felt were the most important services to their first-year success. Descriptive analysis of the collected data was included with the computational analysis.

Summary of the Methodology

Higher education professionals, government agencies, and accrediting bodies have increased efforts to assist student veterans in recent years. The primary assistance focuses on improving degree or certificate attainment so student veterans can transition from the military to the civilian workforce with the highest chance of success. This study sought to assist those efforts by providing student veterans' perceptions of what campus services were most important to academic success during their first year of college. The results will answer the research question—what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework—using quantitative analysis. Attaining student veterans' perceptions informs policymakers and campus leaders on what campus services should be prioritized for the subgroup's attainment success.

CHAPTER IV

RESULTS

The first chapter of this dissertation introduced the reason for the study and the research question underpinning the study, what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? The second chapter provided the literature pertinent to the study. Chapter Three provided the plan for collecting the data needed to respond to the study's research question and details about how the collection occurred. Chapter Four provides the results of the collected data with analysis.

Chapter Roadmap

The Results chapter begins with a summary of the data collection then moves to an analysis of the data using the survey instrument's three sections to organize the results. Sections One, Two, and Three organize the sixteen questions in the order they were presented in the survey instrument. Section One contains the results and analysis for the Consent Form and Questions 1-4, Section Two contains the results and analysis for Questions 5-6, and Section Three contains the results and analysis for Questions 7-16. The analysis of most question results begins with showing the sample size response (n), the raw responses, and a descriptive analysis of the responses. Each section's ending concludes with a summary, and the chapter concludes with an overall summary.

The analysis of Question 5 in Section Two and Questions 10 and 13 in Section Three is different than the other thirteen questions. Those three questions rely on the use of tables due to the complexity of analyzed data. Question 5's collected data contains the ratings of importance

for twenty-two campus services. Due to the six possible ratings for each campus service, the study used tables to organize the results for analysis. Because the Question 5 results were the primary collection in this study, four tables were used to analyze the results. The four tables display the raw scores and some computational analysis. An analysis follows each table.

Questions 10 and 13 in Section Three also used tables to compare service rating results between two groups of participants. Question 10 asked participants if they attended college prior to military service and used a table to compare the service ratings between the students who attended prior to those who attended after military service. Question 13 asked participants if they were male or female. The table compared the service ratings of the female sample against the total. Like Question 5, the tables for Questions 10 and 13 are analyzed.

Instrument Reliability and Validity

Development of the instrument began with the researcher, who is comfortable with using surveys on his campus. After initial development, a handful of knowledgeable experts refined the instrument, particularly the researcher's methodologist committee member. The survey was pilot-tested before widespread distribution, and the pilot test showed no collection or data-housing issues. In the statewide distribution, there were no noticeable impediments to responses, and the collected results were housed as expected. To further determine the instrument's reliability, the study conducted a Cronbach's Alpha to measure the internal consistency of the survey. The importance-rating question of the survey had 285 student veterans rate the 22 services. The value of Cronbach's Alpha for the question was $\alpha = .93$, interpreted as excellent internal consistency (Statology, 2021). The survey instrument is a reliable data collector for future studies on the importance of campus services to student veterans.

Because the survey instrument was new, determining the validity of the questions asked began with a thorough literature review of student veteran studies. The review allowed the researcher to determine the potential of the campus services and biographical questions to ask the sampled student veterans. Subject-matter experts reviewed the potential campus services and

biographical questions and offered suggested revisions. The respondents to the instrument's pilot test offered no additional services to include in the survey, and their biographical information was consistent with the study's expectations. Prior to statewide distribution, the instrument appeared valid.

The responses from the statewide distribution confirmed the validity of the instrument. Section 1 of the survey included the consent form and three screening questions. Of the 381 potential participants who opened the consent form, eighty-two percent continued to respond to the survey following the screening questions. This high percentage indicates the twenty-five institutions assisting the study distributed the survey to the military-affiliated population on their campuses, which includes student veterans. Of the 285 participants who completed Section 2, ten suggested additional services be added to future surveys, but none of the ten suggestions was listed more than once. In Section 3's biographical responses, seventy-eight percent of the collected data aligned with previous findings. The high percentage indicates the participants who provided responses in Section 3 accurately represent the student veteran population. The instrument is valid for collecting data on student veterans.

Data Collection Summary

This study used a survey instrument titled Student Veterans' Use of Campus Support Services to collect data. The study pilot-tested the survey from April 5-9, 2021. Following the successful pilot, the study reached out to 39 student veteran points of contact at colleges and universities in the state and asked them to assist in the distribution of the survey. Statewide distribution of the instrument began on April 14 and ended on June 1, 2021. Twenty-five points of contact assisted by forwarding the survey instrument to student veterans at their institution. The other fourteen institutions either declined to assist or never responded to repeated requests for distribution assistance. All collected responses were anonymous.

The survey instrument had sixteen questions, divided into three sections. The first section was the Consent Form and four Participant Screening responses. In the second section,

participants rated the importance of services in Question 5 and provided any missing services in Question 6. Analysis of Question 5 responses is the primary focus of this study; while this chapter analyzes responses to all questions, the analysis of the other questions informs whether the collected data from Question 5 is meaningful or not. The last section, Questions 7 to 16, collected biographical information to confirm or deny the sample as representative of the student veteran population. Because this is the first quantitative study on student veterans rating the importance of campus services, the need to represent the population accurately is paramount to accepting the study's primary dataset, which are responses to Question 5.

Section 1, Consent Form and Participant Screening, Q1 - Q4

Consent Form

Responses. ($n = 381$), *Yes* = 377, *No* = 4

Analysis. Nearly all of the 381 potential participants selected *Yes* on the Consent Form. The 381 responses from 25 institutions equate to just over 15 students per institution. While the study has enough participants to conduct meaningful analysis, the researcher desired and anticipated a higher response rate. There are two explanations for the lower-than-expected response rate, and the timing of the survey predicates both. The first explanation is the COVID-19 restrictions that took place from spring 2020 to spring 2021. A few of the institutional points of contact warned the researcher that their student veterans were no longer responding to any non-essential emails because of the continuous electronic-only communication (personal correspondence, April 2021).

The second timing-related explanation for the lowered response rate was the end of academic year demands on institutional points of contact. A few of the state's institutions chose not to assist in distributing the survey instrument because of their office's end-of-academic-year demands. For institutions that agreed to assist, the researcher believes that some of the institutional points of contact may have neglected to forward reminders to their student veterans because of their office's end-of-academic-year demands. Even with the lower than expected

response numbers, the data analysis indicates the collected sample is a good representation of the student veteran population, meaning the ratings of campus services are valid.

Question 1

Have you served in the United States Military? (Military service is Active Duty, National Guard, or Reserve duty in the Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force).

Responses. ($n = 377$), *Yes* = 347, *No* = 28, Did not respond = 2.

Analysis. The potential participants who selected *Yes* to Question 1 represent 92 percent of the remaining Consent Form respondents. The 347 *Yes* responses show a majority of the students offered the survey identify as student veterans. The 28 potential participants who selected *No* to Question 1 are likely students receiving VA educational benefits due to a familial relationship with a military veteran. This group is called military-affiliated students. All of the institutional veterans' benefits coordinators that assisted with this study deal with student veterans and military-affiliated students; thus, they have distribution lists that may not delineate between student veterans and military-affiliated students. The 28 *No* responses and the two potential participants that "Did not respond" were removed from further participation in the survey.

Question 2

Are you currently enrolled (within one year) in college-level classes?

Responses. ($n = 347$), *Yes* = 322, *No* = 24, Did not respond = 1

Analysis. The *Yes* responses constitute 93 percent of the potential participants. The *No* responses could be self-identified student veterans who are still on the point of contact's distribution list but have not taken classes for more than one year. The 24 *No* responses and one individual who "Did not respond" were removed from further participation in the survey.

Question 3

Estimate the number of college credits earned after beginning military service.

Responses. ($n = 322$), *Fewer than 30 credit hours* = 64, *30 credit hours or more* = 247, *None, all my college experience was prior to my military service* = 8, Did not respond = 3

Analysis. This question is the final screening tool for the survey. The eight *None* responses and three potential participants who “Did not respond” were removed from the survey. The remaining 311 participants who selected *Fewer than 30 credit hours* or *30 credit hours or more* (97 percent of the responses) all passed the study's screening portion, making them eligible to respond to the remainder of the survey’s questions. Over three-fourths of the respondents selected *30 credit hours or more* earned after military service began. Student veterans who completed one year of credit after military service provide the experience this study seeks to capture, indicating a valid sample.

Question 4

How many total credit hours have you completed, including those earned prior to your military service?

Responses. (n = 311), *Fewer than 30 college credit hours completed* = 47, *30 to 59 college credit hours completed* = 35, *60 to 89 college credit hours completed* = 48, *90 or more college credit hours completed* = 78, *College graduate / Baccalaureate degree completed* = 33, *Graduate student* = 67, *Did not respond* = 3

Analysis. Three hundred eight eligible participants responded to this question. A majority of participants selected 90 or more college credit hours completed or higher, showing that most respondents have completed enough college credit to provide thoughtful and experienced opinions, further bolstering the service rating responses in Question 5. The three eligible participants who “Did not respond” were removed from further participation in the survey.

Section 1 Summary

Of the 381 potential participants who opened the survey, 81 percent remained following the Consent Form and the four screening questions. The remaining 308 participants met the requirements to respond to the survey’s remaining twelve questions. Responses to the questions in Section 1 indicate the survey instrument reached the desired population and likely obtained a valid sample.

Section 2, Ranking of Services, Q5 & Q6

After completing Section 1, 23 of the 308 remaining participants who were eligible to move on to Section 2 left the survey. The study is unable to explain why the participants stopped responding after Section 1. Section 2 begins with 285 remaining participants.

Question 5

The responses to this question answered the study's research question, what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? The question listed 22 services commonly found at colleges and universities considered important to veterans. Respondents were asked to rate how important each of the services was to completing their first year of collegiate courses during or following their military service. The rating options were *Extremely important*, *Important*, *Slightly important*, and *Not important*. For any services that the respondents were unable to provide importance ratings, *Did not use the service* and *Did not have the service available* options were provided.

Importance Score

Table 2 displays the first computational analysis of the question's responses. The table's first column, Service, lists the services that 285 student veterans rated. The service's number is the order of display in the survey. The second column, Utilized Service, shows the total responses for each of the four importance rating options: *Extremely important*, *Important*, *Slightly important*, and *Not important*. The third column, Importance Score, shows the weighted mean for each service and determines the order of services in column one, from highest to lowest. The fourth column, Did not use, shows the number of participants who selected the *Did not use the service* option. The last column, Not Available, shows the respondents who selected the option, *Did not have the service available*.

Table 2*Importance Score*

Service	Utilized Service	Importance Score	Did Not Use	Not Available
1. Admissions / Enrollment assistance	267 (93.7%)	3.55	15 (5.3%)	3 (1.1%)
2. Academic credit for military service	260 (91.2%)	3.22	19 (6.6%)	6 (2.1%)
3. Academic advising	270 (94.7%)	3.40	10 (3.5%)	5 (1.8%)
4. Academic tutoring / support	219 (76.8%)	2.96	60 (21.1%)	6 (2.1%)
5. Study skills workshops / assistance	198 (69.5%)	2.81	76 (26.7%)	11 (3.9%)
6. Clear academic policies and practices	265 (92.9%)	3.17	15 (5.3%)	5 (1.8%)
7. Veterans-only orientation / classroom	182 (63.9%)	2.53	58 (20.4%)	45 (15.8%)
8. Student veterans' peer-to-peer mentoring	180 (63.2%)	2.68	74 (25.9%)	31 (10.9%)
9. Faculty who understand military veterans	271 (95.1%)	3.25	6 (2.1%)	8 (2.8%)
10. Staff who understand military veterans	269 (94.4%)	3.29	8 (2.8%)	8 (2.8%)
11. Advisors / mentors who are military veterans	259 (90.9%)	2.90	13 (4.6%)	13 (4.6%)
12. An office designated to support veterans	265 (92.9%)	3.48	16 (5.6%)	4 (1.4%)
13. Student veterans organization / club	222 (77.9%)	2.77	52 (18.2%)	11 (3.9%)
14. Dedicated social space for student veterans	219 (76.8%)	2.55	48 (16.8%)	18 (6.3%)
15. Assistance with VA educational benefits	277 (97.2%)	3.77	5 (1.8%)	3 (1.1%)
16. Assistance with non-educational VA benefits	245 (85.9%)	3.42	29 (10.2%)	11 (3.9%)
17. Assistance with financial aid benefits	257 (90.2%)	3.51	20 (7.0%)	8 (2.8%)
18. Employment assistance	206 (72.3%)	3.20	67 (23.5%)	12 (4.2%)
19. Career planning assistance	215 (75.4%)	3.26	59 (20.7%)	11 (3.9%)
20. Internet / computer assistance	213 (74.7%)	2.85	57 (20.0%)	15 (5.3%)
21. Counseling services for veterans' issues	217 (76.1%)	3.27	54 (18.9%)	14 (4.9%)
22. Medical services for veterans' issues	201 (70.5%)	3.12	63 (22.1%)	21 (7.4%)

Analysis of Importance Score

Two hundred eighty-five participants provided importance ratings for each of the provided 22 campus services. The Importance Score is found in column three. Percentages, rounded to the nearest tenth, provided in the table's second, fourth, and fifth columns, were

computed to account for the 285 responses and will be used to discuss the results of those three columns. The order of the analysis will be by column, left to right. The first analysis will be of the Utilized Service column (N), then the Importance Score, the Did not use column (n), and the Not Available (n) column.

Utilized Service. The second column shows different response percentages for each service ranging from 97.2 to 63.2. The lowest percentage reveals the majority of participants had experience with each of the 22 campus services, substantiating the Importance Score ratings.

Sixteen of the 22 services had utilization rates of 75 percent or higher. Those services from the highest rate to the lowest were Assistance with VA educational benefits, Admissions/enrollment assistance, An office designated to support veterans, Assistance with financial aid benefits, Academic advising, Faculty who understand military veterans, Staff who understand military veterans, Academic credit for military service, Clear academic policies and practices, Advisors/mentors who are military veterans, Assistance with non-educational VA benefits, Counseling services for veterans' issues, Student veterans organization/club, Dedicated social space for student veterans, Career planning assistance, and Counseling services for veterans' issues. The six services with utilized rates below 75 percent were Employment assistance, Medical services for veterans' issues, Internet/computer assistance, Study skills workshops/assistance, Student veterans' peer-to-peer mentoring, and Veterans-only orientation/classroom with the lowest Utilized Service rate of 63.9 percent. The six services with a less than three-fourths usage rate may indicate that the perceived value of the service to the participants was on the lower end compared to the other sixteen services or that the service was not available.

Importance Score. The perceived value of each service is provided in the third column, which shows the weighted mean score calculation based on the responses across the four-point importance scale, *Extremely important* (4), *Important* (3), *Slightly important* (2), and *Not important* (1). Each of the twenty-two service scores could have ranged from 1 to 4, with 2.5 as

the median. The Importance Score's actual range was 2.53 to 3.77. The range's lowest score of 2.53 suggests the selections of services important to student veterans was appropriate because each service's Importance Score was above the median of 2.5.

The study arbitrarily placed the scores into high, middle, and low groups to analyze the scores. This grouping provided some indication of which services the participants found more important than others. Determining the significance of the Importance Scores was accomplished by a Chi-square test for each of the twenty-two services. Determining significance allowed the study to confirm which of the service scores were more likely to observe frequencies outside of the expected frequencies. The Chi-square tests are shown following the analysis of the Importance Score table.

The six services placed in the high group all had Importance Scores above 3.4. The services, beginning with the highest, were Assistance with VA educational benefits (3.77), Admissions / Enrollment assistance (3.55), Assistance with financial aid benefits (3.51), An office designated to support student veterans (3.48), Assistance with non-educational VA benefits (3.42), and Academic advising (3.4). The *Utilized Service* rates for these services range from 97.2 percent for Assistance with VA educational benefits to 85.9 percent for Assistance with non-educational VA benefits. The high Importance Score coupled with the high rate of usage suggests the participating student veterans found the services important to their first year of collegiate studies.

Eight services had Importance Scores below 3.3 but above 3.0. This middle group of scores, from highest to lowest, begins with Staff who understand military veterans (3.29), Counseling services capable of dealing with veterans' issues (3.27), Career planning assistance (3.26), Faculty who understand military veterans (3.25), Academic credit for military service (3.22), Employment assistance (3.2), Clear academic policies and practices (3.17), and Medical services capable of dealing with veterans' issues (3.12). Two of these eight services had Utilized Service rates below 75 percent, Employment assistance and Medical services for veterans' issues.

These lower usage rates indicate that while three-fourths of the participants did not use the services, the participants who did use the services found them more important than the eight services with the lowest Importance Scores.

The eight services placed in the low group had weighted mean scores ranging from 2.96 to 2.53. Those eight services were Academic tutoring/support (2.96), Advisors/mentors who are military veterans (2.9), Internet/computer assistance (2.85), Study skills workshops/assistance (2.81), Student veterans organization/club (2.77), Student veterans' peer-to-peer mentoring (2.68), Dedicated social space for student veterans (2.55), and Veterans-only orientation/classroom (2.53). One of the eight services, Advisors/mentors who are military veterans, had a usage rate of 90.9 percent, suggesting that even though a large percentage of participants used the service, they did not find the service overly important. The other seven services had *Utilized Service* rates below 80 percent, which is on the lower end of the usage rate range. This further suggests the participants did not find the eight services overly important to the success of the first year.

Did not use. The fourth column shows the number of respondents who selected the option, *Did not use*, indicating the service was available, but the student veteran chose not to use the service and had no way to measure the level of importance. The range of percentages in the *Did not use* column is 26.7 to 1.8.

Eleven services had *Did not use* rates above 16.8 percent, and two of those eleven, Study skills workshops/assistance and Student veterans' peer-to-peer mentoring, had *Did not use* percentages of 25 percent or more. Meaning, over one-quarter of the respondents had access to the two services but chose not to use them. Another six services had *Did not use* percentages of 20 or more. These were Career planning assistance, Employment assistance, Medical services for veterans' issues, Academic tutoring/support, Internet/computer assistance, and Veterans-only orientation/classroom. The last three services had *Did not use* percentages ranging from 16.8 to 18.9 percent. They were Counseling services for veterans' issues, Student veterans

organization/club, and Dedicated social space for student veterans. None of the eleven services with *Did not use* rates above 16.8 percent were in the high group of Importance Scores.

The *Did not use* rates for the other eleven services ranged from a high of 10.2 percent to a low of 1.8 percent. Ten of those eleven services were either in the high or middle group of Importance Scores, meaning they scored 3.0 or higher. This suggests that services with a low *Did not use* rate also had a higher Importance Score. The one service that did not fit the suggestion was also singled out in the *Utilized Service* analysis for having a high usage rate of 90.9 percent with an Importance Score in the low group, 11 – Advisors/mentors who are military veterans. Thus, the *Did not use* column's services with a percentage of ten or lower are likely to have an Importance Score above 3.0.

Not Available. The fifth column shows the number of respondents that selected the option, *Did not have the service available* for each of the listed 22 services. The range of percentages in the column is 15.8 to 1.1. Two of the services, 8 - Student veterans' peer-to-peer mentoring and 7 - Veterans-only orientation/classroom, have *Not Available* percentages in double digits, 15.8 and 10.9 percent, respectively. Both of these services also had low group Importance Scores. The other twenty services have *Not Available* percentages of 7.4 or less, making the majority of the listed services available at a 90 percent rate or more of the sampled student veterans.

Chi-square Test

The one sample Chi-square test for goodness of fit was used to determine if the results from the four categories of the Importance Score were similar for each of the 22 services. If so, each of the importance categories would have an equal distribution, and the expected frequency would be 25 percent. The Chi-square test calculated if the observed frequencies statistically aligned to the expected frequencies, retaining the null hypothesis that each of the four importance ratings (treatments) would have an equally distributed selection frequency.

Table 3 shows the results of the Chi-square test using five columns. The first column lists the services in the order they were presented in the collection instrument. The second column lists each service's sample (N) and observed frequencies (f_o) of the four importance ratings. The third column lists the expected frequency (f_e) for each importance rating. The fourth column displays the Chi-square test result of the calculation $(f_o - f_e)^2 / f_e = \chi^2$, in bold font. The fifth column shows each calculation's degrees of freedom (df). The sixth column states whether the null hypothesis was retained, meaning each of the four ratings was selected at a statistically equal rate; or was rejected, meaning at least one of the ratings was selected at a statistically unequal rate. To meet a probability value of 95 percent (p-value > .05), the critical value for significance was 7.81. Calculations greater than 7.81 rejected the null hypothesis (p<.05) and were significant.

Table 3*Chi-square Test for Total Sample*

Service	Sample size (<i>n</i>) and Observed frequency (<i>f_o</i>)	Expected frequency (<i>f_e</i>)	χ^2	df	H ₀ (p value)
1	<i>n</i> =267, <i>f_o</i> =168, 83, 11, 5	66.75	261.22	3	Rejected (p<.05)
2	<i>n</i> =260, <i>f_o</i> =138, 63, 36, 23	65.00	122.12	3	Rejected (p<.05)
3	<i>n</i> =270, <i>f_o</i> =147, 92, 23, 8	67.50	184.31	3	Rejected (p<.05)
4	<i>n</i> =219, <i>f_o</i> =81, 65, 56, 17	54.75	40.56	3	Rejected (p<.05)
5	<i>n</i> =198, <i>f_o</i> =62, 57, 59, 20	49.50	23.70	3	Rejected (p<.05)
6	<i>n</i> =265, <i>f_o</i> =115, 95, 41, 14	66.25	99.18	3	Rejected (p<.05)
7	<i>n</i> =182, <i>f_o</i> =51, 40, 45, 46	45.50	1.34	3	Retained (p>.05)
8	<i>n</i> =180, <i>f_o</i> =52, 46, 54, 28	45.00	9.33	3	Rejected (p<.05)
9	<i>n</i> =271, <i>f_o</i> =142, 73, 38, 18	67.75	131.38	3	Rejected (p<.05)
10	<i>n</i> =269, <i>f_o</i> =146, 75, 29, 19	67.25	149.48	3	Rejected (p<.05)
11	<i>n</i> =259, <i>f_o</i> =99, 70, 55, 35	64.75	33.68	3	Rejected (p<.05)
12	<i>n</i> =265, <i>f_o</i> =162, 75, 22, 6	66.25	223.89	3	Rejected (p<.05)
13	<i>n</i> =222, <i>f_o</i> =66, 71, 54, 31	55.50	17.17	3	Rejected (p<.05)
14	<i>n</i> =219, <i>f_o</i> =59, 54, 54, 52	54.75	0.49	3	Retained (p>.05)
15	<i>n</i> =277, <i>f_o</i> =221, 49, 5, 2	69.25	463.38	3	Rejected (p<.05)
16	<i>n</i> =245, <i>f_o</i> =143, 68, 27, 7	61.25	177.06	3	Rejected (p<.05)
17	<i>n</i> =257, <i>f_o</i> =164, 66, 22, 5	64.25	237.33	3	Rejected (p<.05)
18	<i>n</i> =206, <i>f_o</i> =92, 71, 35, 8	51.50	81.26	3	Rejected (p<.05)
19	<i>n</i> =215, <i>f_o</i> =97, 81, 32, 5	53.75	101.63	3	Rejected (p<.05)
20	<i>n</i> =213, <i>f_o</i> =73, 64, 48, 28	53.25	21.99	3	Rejected (p<.05)
21	<i>n</i> =217, <i>f_o</i> =106, 75, 25, 11	54.25	107.55	3	Rejected (p<.05)
22	<i>n</i> =201, <i>f_o</i> =94, 58, 29, 20	50.25	66.48	3	Rejected (p<.05)

Analysis of Chi-square Test

Twenty services rejected the null, and two services retained the null. The twenty services that rejected the null had at least one of the four importance ratings, *Extremely important*, *Important*, *Slightly important*, and *Not important*, selected by the participants at a non-equal rate; the observed frequency of selection was significantly higher or lower than the expected frequency of 25 percent. The two services that retained the null had equal distributions of selected importance ratings.

The twenty services that showed statistically significant differences in the importance ratings were, service 1, Admission / Enrollment assistance, $\chi^2(3, n = 267) = 261.2, p < .05$. Service 2, Academic credit for military service, $\chi^2(3, n = 260) = 122.12, p < .05$. Service 3, Academic advising, $\chi^2(3, n = 270) = 184.31, p < .05$. Service 4, Academic tutoring / support, $\chi^2(3, n = 219) = 40.64, p < .05$. Service 5, Study skills workshops / assistance, $\chi^2(3, n = 198) = 23.7, p < .05$. Service 6, Clear academic policies and practices, $\chi^2(3, n = 265) = 99.18, p < .05$. Service 8, Student veterans' peer-to-peer mentoring, $\chi^2(3, n = 180) = 9.33, p < .05$. Service 9, Faculty who understand military veterans, $\chi^2(3, n = 271) = 131.38, p < .05$. Service 10, Staff who understand military veterans, $\chi^2(3, n = 269) = 149.48, p < .05$. Service 11, Advisors / mentors who are military veterans, $\chi^2(3, n = 259) = 33.68, p < .05$. Service 12, An office designated to support veterans, $\chi^2(3, n = 265) = 223.89, p < .05$. Service 13, Student veterans organization / club, $\chi^2(3, n = 222) = 17.17, p < .05$. Service 15, Assistance with VA educational benefits, $\chi^2(3, n = 277) = 463.38, p < .05$. Service 16, Assistance with non-educational VA benefits, $\chi^2(3, n = 245) = 177.06, p < .05$. Service 17, Assistance with financial aid benefits, $\chi^2(3, n = 257) = 237.33, p < .05$. Service 18, Employment assistance, $\chi^2(3, n = 206) = 81.26, p < .05$. Service 19, Career planning assistance, $\chi^2(3, n = 215) = 101.63, p < .05$. Service 20, Internet / computer assistance, $\chi^2(3, n = 213) = 21.99, p < .05$. Service 21, Counseling services for veterans' issues, $\chi^2(3, n = 217) = 107.55, p < .05$. Finally, service 22, Medical services for veterans' issues, $\chi^2(3, n = 201) = 66.48, p < .05$.

Two services did not show statistically significant differences in importance ratings. Their critical value fell below 7.81, meaning they had a statistically equal distribution of expected and observed frequencies and retained the null hypothesis. Those services were 7, Veterans-only orientation / classroom, $\chi^2(3, n = 182) = 1.34, p > .05$, and 14, Dedicated social space for student veterans, $\chi^2(3, n = 219) = 0.49, p > .05$. Services 7 and 14 also had the lowest Importance Score results at 2.53 and 2.55, respectively.

Post hoc Test

The twenty services that showed significance had at least one of the four importance ratings not distributed equally. The study conducted a post hoc test on the twenty services that rejected the null to determine where the non-equal distributions occurred. The post hoc test isolated each service's importance ratings, *Extremely important*, *Important*, *Slightly important*, and *Not important*, to determine which of the ratings were significant. Once the rating was isolated, a Chi-square value was determined for the isolated rating and added to the Chi-square value for the other three ratings that were grouped. The sum of the two values was compared to the critical value to determine if the isolated rating was significant or not. Based on a probability value of 95 percent, the critical value for significance was 3.84. Table 4, Post Hoc Test for Significance, lists each of the twenty services that rejected the null hypothesis and their post hoc test value for each of the service's importance ratings.

Table 4's first column shows the services in the order they were presented in the collection instrument. The second column displays each service's Chi-square test value for the participants' selection of the Extremely important rating for each service. The third column displays the Chi-square value for the participants' selection of the Important rating for each service. The fourth column displays the Chi-square value for the participants' selection of Slightly important rating for each service. The fifth column shows the Chi-square values for the participants' selection of the Not important rating for each service. Bolded numbers indicate the values that were statistically significant selections. Non-bolded numbers were not statistically significant.

Table 4*Post Hoc Test for Significance*

Service	Extremely important	Important	Slightly important	Not important
1 - Admissions / Enrollment assistance	204.78	5.27	62.08	76.17
2 - Academic credit for military service	109.38	0.08	17.25	36.18
3 - Academic advising	124.48	11.86	39.12	69.93
4 - Academic tutoring / support	16.78	2.56	0.04	34.7
5 - Study skills workshops / assistance	4.21	1.52	2.43	23.44
6 - Clear academic policies and practices	47.83	16.64	12.83	54.94
8 - Student veterans' peer-to-peer mentoring	1.45	0.03	2.4	8.56
9 - Faculty who understand military veterans	108.5	0.54	17.42	48.71
10 - Staff who understand military veterans	122.96	1.19	29.01	46.16
11 - Advisors / mentors who are military veterans	24.16	0.57	1.96	18.23
12 - An office designated to support veterans	184.51	1.54	39.41	73.06
13 - Student veterans organization / club	2.65	5.77	0.05	14.42
15 - Assistance with VA educational benefits	443.38	7.9	79.48	87.08
16 - Assistance with non-educational VA benefits	145.48	0.99	25.54	64.07
17 - Assistance with financial aid benefits	206.49	0.06	37.04	72.85
18 - Employment assistance	42.47	9.84	7.05	48.99
19 - Career planning assistance	46.4	18.42	11.73	58.95
20 - Internet / computer assistance	9.77	2.89	0.69	15.96
21 - Counseling services for veterans' issues	65.82	10.58	21.03	45.97
22 - Medical services for veterans' issues	50.79	1.59	11.98	24.28

Analysis of the Post Hoc Test for Significance

Of the 20 services that reject the null hypothesis, seven were selected by the participants at a significant rate for each of the four importance ratings, *Extremely important*, *Important*, *Slightly important*, and *Not important*. The importance ratings for each of those seven services were not observed as expected. Those seven services are 1- Admissions / Enrollment assistance, 3 - Academic advising, 6 - Clear academic policies and practices, 15 - Assistance with VA educational benefits, 18 - Employment assistance, 19 - Career planning assistance, and 21 - Counseling services for veterans' issues.

Another seven services had significant selections for three of the four importance ratings. Those seven services were 2 - Academic credit for military service, 9 - Faculty who understand

military veterans, 10 - Staff who understand military veterans, 12 - An office designated to support veterans, 16 - Assistance with non-educational VA benefits, 17 - Assistance with financial aid benefits, and 22 - Medical services for veterans' issues. All seven of these services had non-significant selections for the *Important* rating. Meaning the participants' rating of *Important* for the service was statistically within the expected frequency.

Five services had significant selections for two of the four importance ratings. Those five services were 4 - Academic tutoring/support, 5 - Study skills workshops/assistance, 11 - Advisors / mentors who are military veterans, 13 - Student veterans organization/club, and 20 - Internet / computer assistance. Four of the five services, 4, 5, 11, and 20, had significant selections for the *Extremely important* and *Not important* ratings, suggesting the study's participants felt more strongly about those importance ratings than the non-significant selections for the *Important* and *Slightly important* ratings. Service 13's significant selections were for the *Important* and *Not important* ratings, suggesting the participants felt more strongly about those ratings than the non-significant *Extremely important* and *Slightly important* ratings.

One service had a significant selection for one of the four importance ratings. That service was 8 - Student veterans' peer-to-peer mentoring, and its significant selection was the *Not important* rating. The two services not shown in the table, 7 - Veterans-only orientation / classroom and 14 - Dedicated social space for student veterans, did not have any significant results and were not part of the post hoc test for significance.

While Table 4 shows which of the selections' Chi-square test results were significant, the table does not show how the selection influences the Importance Scores. The study needed to know if the observed significant values are above or below the expected frequency to understand the significance relationship. Significance above the expected frequency indicated a high selection rate for the importance rating, while significance below the expected frequency indicated a low selection rate.

Relationship of Importance Scores and Significant Results

This study's research question was: what campus services do student veterans feel were most important to their academic success during their first year of college-level coursework? Knowing what selections were significant for each service's importance ratings allowed the study to determine which services were most important to the participating student veterans. The following table incorporates information displayed in previous tables to show how the significant selections relate to each service's Importance Score. The table shows the Importance Scores from Table 2, the expected frequency for each service from Table 3, and the significant selections from Table 4, modified to show whether the selections were Above or Below the expected frequency.

Table 5's first column shows the number assigned to the services presented in the collection instrument. The table's second column determines the rows presented by displaying each service's Importance Score from the highest score to the lowest score. The third column shows each service's expected frequency (f_e) for each importance rating. The fourth column shows the observed frequencies (f_o) for each service's *Extremely important* rating and whether significant f_o values were Above the f_e or whether the values were not significant (Not Sig). The fifth column displays the f_o for each service's *Important* rating and whether the significant f_o values were Below or Above the f_e , or if the values were Not Sig. The sixth column shows the f_o for each service's *Slightly important* rating and whether the significant f_o values were Below the f_e , or if the values were Not Sig. The seventh and last column shows the f_o for each service's *Not important* rating, and whether the significant f_o values were Below the f_e , or if the values were Not Sig.

Table 5*Relationship of Importance Scores and Significant Values*

Service	Importance Score	f_e	Extremely important f_o	Important f_o	Slightly important f_o	Not important f_o				
15	3.77	69.25	221	Above	49	Below	5	Below	2	Below
1	3.55	66.75	168	Above	83	Above	11	Below	5	Below
17	3.51	64.25	164	Above	66	Not Sig	22	Below	5	Below
12	3.48	66.25	162	Above	75	Not Sig	22	Below	6	Below
16	3.42	61.25	143	Above	68	Not Sig	27	Below	7	Below
3	3.40	67.50	147	Above	92	Above	23	Below	8	Below
10	3.29	67.25	146	Above	75	Not Sig	29	Below	19	Below
21	3.27	54.25	106	Above	75	Above	25	Below	11	Below
19	3.26	53.75	97	Above	81	Above	32	Below	5	Below
9	3.25	67.75	142	Above	73	Not Sig	38	Below	18	Below
2	3.22	65.00	138	Above	63	Not Sig	36	Below	23	Below
18	3.20	51.50	92	Above	71	Above	35	Below	8	Below
6	3.17	66.25	115	Above	95	Above	41	Below	14	Below
22	3.12	50.25	94	Above	58	Not Sig	29	Below	20	Below
4	2.96	54.75	81	Above	65	Not Sig	56	Not Sig	17	Below
11	2.90	64.75	99	Above	70	Not Sig	55	Not Sig	35	Below
20	2.85	53.25	73	Above	64	Not Sig	48	Not Sig	28	Below
5	2.81	49.50	62	Above	57	Not Sig	59	Not Sig	20	Below
13	2.77	55.50	66	Not Sig	71	Above	54	Not Sig	31	Below
8	2.68	45.00	52	Not Sig	46	Not Sig	54	Not Sig	28	Below
14	2.55	54.75	59	Not Sig	54	Not Sig	54	Not Sig	52	Not Sig
7	2.53	45.50	51	Not Sig	40	Not Sig	45	Not Sig	46	Not Sig

Analysis of Relationship of Importance Scores and Significant Values Table

The second column, Importance Score, shows the scores for each service from highest to lowest, determining the order of service numbers in the first column. The highest score, 3.77, is for service 15 - Assistance with VA educational benefits, and the lowest, 2.53, is for service 7 - Veterans-only orientation/classroom. The third column, f_e , column shows the expected frequency for each service based on the number of participants who selected an importance rating. Because there were four importance ratings, the expected frequency multiplied by four provides the number of participants who selected an importance rating for the service. The service with the highest expected frequency was 69.25 for service 15 - Assistance with VA educational benefits,

meaning more participants selected an importance rating for that service than the other services. The lowest expected frequency was 45.00 for service 8 - Student veterans' peer-to-peer mentoring, meaning it had the fewest number of importance rating responses.

The fourth, fifth, sixth, and seventh columns showed the Importance Score for each service and whether the score was significant or not. The columns showed some patterns on how significant values in three columns, *Extremely important*, *Slightly important*, and *Not important* ratings, influenced the Importance Score. In the *Extremely important* column, the study's participants selected the rating Above the expected frequency for the top 18 Importance Scores. For each of those 18 services, Extremely important selection was more likely to be observed than expected. In the *Slightly important* column, the study's participants selected the rating Below the expected frequency for the top 14 Importance Scores. For those 14 services, the selection of *Slightly important* was less likely to be observed than expected. In the *Not important* column, the study's participants selected the rating Below the expected frequency for the top 20 Importance Scores. For those 20 services, the selection of *Not important* was less likely to be observed than expected.

Thus, the 14 services with the highest Importance Score showed the study's participants the same pattern of significant selections. For those 14 services, the selection of *Extremely important* was more likely to be observed than expected, and the selections of *Slightly important* and *Not important* were less likely to be observed than expected. The services that had a similar pattern of significant values, from highest to lowest Importance Score, were: 15 - Assistance with VA educational benefits, 1 - Admissions / Enrollment assistance, 17 - Assistance with financial aid benefits, 12 - An office designated to support veterans, 16 - Assistance with non-educational VA benefits, and 3 - Academic advising, which were the high group Importance Scores. The remaining eight services were the middle group of Importance Scores, 10 - Staff who understand military veterans, 21 - Counseling services for veterans' issues, 19 - Career planning assistance, 9 - Faculty who understand military veterans, 2 - Academic credit for military service, 18 -

Employment assistance, 6 - Clear academic policies and practices, and 22 - Medical services for veterans' issues.

The *Important* rating column, column 5, did not have a pattern of significant selections. Below was the first significant value in the Important column, and the other seven significant values in the column were Above the expected frequency. The eight significant values in the *Important* column did not show a consistent pattern of influence on Importance Scores. Because the *Important* rating did not have a pattern of significance, the rating cannot be considered an indicator of the participant's Importance Score selections. The other importance ratings, *Extremely*, *Slightly*, and *Not important*, were indicators of how the student veterans felt about a service's importance. To be precise, if the *Slightly important* rating was more likely to be observed Below the expected frequency, the service's Importance Score was above a 3.1 on a four-point scale.

The Below significant value for service 15 indicated how important the study's participants felt about the service. Because 221 participants selected the *Extremely important* rating, only 56 were left to select one of the three remaining importance ratings. There weren't enough participants left to meet the expected frequency of 69.25 for any of the three remaining ratings. The *Extremely important* selection for the Assistance with VA educational benefits service was more likely to be observed than the expected frequency for the other importance ratings. Additionally, service 15 is unique when compared to the other services in the table as no other services had one Above and three Below significant values.

Question 6

Were there any campus services not listed in the survey that you found important during your first year of college coursework during or following military service? If so, please write the service(s) in the space provided.

Responses. (n=285), Fifty-four (54) participants provided written responses.

Analysis. Thirty-four responses (82 percent) appear to confirm the selection of the 22 campus services selected for the survey. Of the 34 confirming responses, twenty-eight (52 percent) were “N/A, No, or None” entries, meaning no additional services need to be listed in the survey. Sixteen confirming responses (30 percent) either highlighted one of the listed services or provided remarks about one of the listed services. Examples include “Faculty Training to understand Veterans” and “A Veterans Club Organization would be nice to have on campus. It could allow the opportunity for social gathering and mentoring.”

Ten of the total 54 responses (18 percent) suggested additional services for student veterans. Two of the ten additions involved stress-reducing services: “A low sensitivity room for those that need space to relax or reduce stress” and “Meditation or yoga classes or gym buddies.” Another two suggestions involve the campus recognizing military veterans: “University events focused on veterans” and “Veteran recognition with a graduation cord or stole.” Three of the ten suggestions involve financial considerations: “Discount on books,” “Quick bill pay services for Veteran Affairs to obtain an official transcript,” and “Scholarship application assistance.” The final three suggestions involve academic-related activity: “Military scheduling,” “Veterans Upward Bound,” and “Waiving traditional admission testing (ACT/SAT).” Because no additional services were listed more than once, the study’s selection of campus services was likely comprehensive.

Section 2 Summary

Responses to Question 5 appear to substantiate the twenty-two campus services used for student veterans’ importance ratings. Table 2, Importance Score, showed that all the services had a weighted mean calculation the study titled Importance Score of 2.53 to 3.77 on a four-point scale (1-4), indicating a level of at least above average importance. The four-point scale’s four importance ratings were *Not important* (1), *Slightly important* (2), *Important* (3), and *Extremely important* (4). The response rates in the Utilized Services, Did not use, and Not Available columns indicate the listed services were important to the sample. The responses to Question 5,

along with the excellent internal consistency score from the Cronbach's Alpha test, indicated a reliable instrument for additional analysis and a good baseline for future studies.

The Importance Scores for the rated services showed the participants felt some services were more important than others. The study arbitrarily grouped the Importance Scores into high, middle, and low groups to improve the analysis of the 22 services. The six services in the high group all had an Importance Score above at least a 3.4. The eight services in the middle group had mean scores below 3.3 but above 3.1. The eight services in the low group had Importance Scores below 3.0.

The study used a Chi-square test to determine if the data collected was statistically significant. The Chi-square goodness of fit test's null hypothesis was the participant's selection of all four importance ratings for each of the 22 services would be equally distributed. Table 3, Chi-square test for the Total Sample, showed twenty services rejected the null hypothesis. The null hypothesis rejection means the study's participants selected at least one of the four importance ratings for twenty services at a statistically significant, non-equal rate. Two services retained the null hypothesis, meaning the participants selected all four of the service's importance ratings at a statistically equal rate.

The study conducted a Post Hoc Test for Significance to understand where the significant selections occurred in the 20 services that rejected the null hypothesis. Table 4 showed the participants selected the importance rating *Extremely important* at a statistically significant rate for 18 of the 20 services. The table showed the *Important* selection was significant for eight of the 20 services, the *Slightly important* selection was significant for 14 of the 20 services, and the *Not important* selection was significant for all 20 services that rejected the null hypothesis.

To determine if the significant selections for the importance ratings were above or below the expected frequency given in the Chi-square test's null hypothesis, the study had to conduct another post hoc test. The second post hoc test was named the Relationship of Importance Scores and Significant Results, and the calculations were provided in Table 5. The table showed that the

14 services that comprised the high and middle groups of Importance Scores, means of 3.1 or higher, had the same significant selections for *Extremely important*, *Slightly important*, and *Not important* ratings. In all 14 of the services, participants selected the *Extremely important* rating above the expected frequencies and selected the *Slightly important* and *Not important* ratings below the expected frequencies. The selections in the *Important* rating did not show a pattern in relation to the Importance Scores. The one Below significant selection in the *Important* column showed how important the Assistance with VA educational benefits service was to the participants compared to the other 21 services.

Respondents listed ten missing services in Question 6. Each of the ten services was listed only one time, suggesting the importance rating question was not missing any services a substantial portion of the sample felt were important to the success of their first year in college. Future studies might explore additional literature to ascertain whether the ten added services should be included in studies on the important services to student-veteran success.

Section 3, Biographical Data, Q7 - Q16

Introduction

Responses to survey questions in Section 3 were optional for respondents. Of the 285 respondents who rated the twenty-two services, 282 continued providing responses for the ten questions in Section 3. A few of the 282 respondents did not provide responses to one or more of the section's questions. The inclusion of the ten questions was primarily done to ensure the sample was an accurate representation of the student veteran population, indicating whether the sample collected was valid. Thus, the majority of the analysis is concerned with whether the sample represents the population. Due to biographical uniqueness, the analyses of Questions 10 and 13 include tables similar to the analysis of Question 5.

Question 7

What military branch have you served in? (Multiple responses authorized)

Responses. (n=282), *U.S. Coast Guard* = 2, *U.S. Air Force* = 68, *U.S. Army* = 124, *U.S. Marine Corps* = 41, *U.S. Navy* = 33, *More than one branch* = 14

Analysis. Three of the participants from Section 2 stopped responding once they got to Section 3. A majority of the respondents, 72 percent, selected either *U.S. Air Force*, *U.S. Army*, or *More than one branch*, of which all responses had either Army/Air Force as one of the two branches. This result confirms the study's expectations of having a majority of the sample as Air Force or Army veterans due to the preponderance of those military units in the Midwestern state where the study was conducted.

Question 8

What is the highest military rank you attained?

Responses. (n=282), *Enlisted, E1 to E4* = 93, *Non-commissioned officer, E5 to E6* = 135, *Senior non-commissioned officer, E7 to E9* = 38, *Commissioned officer, O1 to O3* = 10, *Field grade officer, O4 to O6* = 6

Analysis. A majority of responses (81 percent) self-identified as *Enlisted* or *Non-commissioned officer*, which meets the expectations of the study. *Senior non-commissioned officers* represented thirteen percent of the sample, and five percent were either *Commissioned* or *Field grade officers*. Since previous studies have not delineated the military rank of samples, this result allows for a discussion to begin on how military rank might influence student veteran study findings.

Question 9

Did your military service include any combat tours?

Responses. (n=282), *Yes* = 168, *No* = 114

Analysis. Sixty percent of the respondents report having combat tours in their military experience. This result is consistent with previous studies that find a majority of this past decade's student veterans have combat experience, suggesting a representative sample was

obtained for the study (Barnard-Brak, Bagby, Jones, and Sulak, 2011; Eakman et al. 2016; Kato, Jinkerson, Holland, and Soper, 2016; Southwell et al. 2018).

Question 10

Did you attend college prior to your military service?

Responses. (n=282), *Yes* = 140, *No* = 141, Did not respond = 1

Analysis. The results show roughly half of the sample, 140, had college experience before their military service, and the other half, 141, had college experience after beginning their military service. Question 10 was added because of the study's focus on understanding the importance of services to student veterans during their first year of collegiate studies following military service. A possibility existed that the two groups had different opinions on the importance of each service.

Before/After College Experience Comparison

Table 6 explores the possibility of significantly different opinions between the two groups using measurements and calculations previously discussed in Question 5's analysis. The first column of Table 6 lists the assigned numbers for the 22 campus services participants rated for importance. The second column, Utilized Service, compares the number of the Before and After samples who selected one of the four importance ratings with the sample's rate of selection in parentheses. The Before sample selected *Yes* to Question 10, meaning they had college before their military service, and the After sample selected *No*, meaning their college experience came after beginning military service. The third column compares the Before and After sample's Importance Score, the weighted mean of their four importance ratings. The fourth column compares the Before and After sample's Chi-square test result for each service. Significant Chi-square calculations are presented in bold font.

Table 6*Before/After College Experience Comparison*

Service	Utilized Service		Importance Score		Chi-square test result	
	Before (n=140)	After (n=141)	Before	After	Before	After
1	131 (94%)	136 (97%)	3.56	3.54	129.06	132.29
2	130 (93%)	130 (92%)	3.18	3.25	58.37	64.52
3	133 (95%)	137 (97%)	3.46	3.34	107.03	83.88
4	107 (76%)	112 (79%)	3.08	2.84	30.38	12.93
5	93 (66%)	105 (75%)	3.02	2.63	22.23	8.49
6	133 (95%)	132 (94%)	3.24	3.11	58.61	43.33
7	88 (63%)	94 (67%)	2.59	2.47	3.64	0.55
8	83 (59%)	97 (69%)	2.84	2.54	9.96	3.82
9	135 (96%)	136 (97%)	3.32	3.18	77.83	54.65
10	134 (96%)	135 (96%)	3.31	3.27	75.25	74.93
11	129 (92%)	130 (92%)	2.93	2.87	19.12	15.42
12	134 (96%)	131 (93%)	3.48	3.49	111.37	113.31
13	106 (76%)	116 (82%)	2.90	2.66	22.08	3.79
14	104 (74%)	115 (82%)	2.62	2.49	2.77	0.79
15	138 (99%)	139 (99%)	3.80	3.73	242.41	221.26
16	120 (86%)	125 (89%)	3.47	3.37	99.67	78.87
17	126 (90%)	131 (93%)	3.51	3.52	113.94	124.30
18	94 (67%)	112 (79%)	3.33	3.09	52.47	34.07
19	102 (73%)	113 (80%)	3.40	3.12	67.49	39.11
20	102 (73%)	111 (79%)	2.94	2.77	16.43	9.61
21	108 (77%)	110 (78%)	3.34	3.20	62.74	46.19
22	101 (72%)	100 (71%)	3.15	3.10	34.17	35.36

Analysis of Before/After College Experience Comparison

Instead of looking at the numerous specific differences present in Table 6, the study will focus on generalities to get to the different significant results. The Utilized Service rates are generally higher for the After sample. The After sample had higher rates of usage in 15 of the 22 services, and the Before sample had higher rates of usage for four services, while three services had equal rates of usage. In the Importance Score comparisons, the Before sample had higher scores in 19 of the 22 services, and the After sample had higher Importance Scores in three

services. To summarize the broad comparison of the Utilized Service and Importance Score columns, the After sample used the services more than the Before sample, but the Before sample rated the services as more important than the After sample.

Each sample's primary difference provides an explanation of the divergence in usage rate and Importance Scores. The After sample were student veterans who began college following their military service. The Before sample were student veterans who had college experience prior to their military service. The After sample likely used more campus services because they were not familiar with campus services but found the services lacking in what they were looking for after using them. The Before sample had experience with campus services before their military experience, so they likely had a better idea of what services were already important to them and did not have to try out as many different services. This explanation suggests that campuses should intentionally focus efforts on incorporating student veterans whose first collegiate experience is after their military service because that group of students may not fully understand the services a campus offers or the purpose of the services a campus offers.

For the Chi-square test comparisons, 18 of the 22 services showed significant selections by both the Before and After samples. Both samples selected two services at non-significant rates, services 7 and 13. The remaining two services, 8 – Student veterans' peer-to-peer mentoring and 13 - Student veterans' organization/club, were selected differently by the two sample groups. This difference of significance selection was the focus of the remaining analysis for Question 10.

The Chi-square test results for services 8 and 13 showed the Before sample with a significant result. The Chi-square test for services 8 and 13 showed the After sample with a non-significant result. The other two comparisons for both services, Utilized Service and Importance Score, follow the general pattern of the overall trend. The After sample's Utilized Service rate for the two services was higher than the Before sample's rate. The Before sample's Importance Score for the services 8 and 13 were higher than the After sample's scores.

The study conducted a post hoc test to determine which of the four importance ratings the Before sample selected as significant for services 8 and 13. Since the After sample did not select either service 8 or 13 as significant, no post hoc test on those results was necessary. The post hoc tests for the Before sample's significant selections of services 8 and 13 are shown in the table below.

Table 7 shows the four importance ratings, *Extremely important*, *Important*, *Slightly important*, and *Not important*, which are listed in a row to the right of each service. Like Table 6, Table 7 combines some of the measurements previously discussed in Question 5. Importance ratings for Service 8 and 13 that were not statistically significant were labeled as "Not Significant." Statistically significant scores were bolded with Above or Below to show whether the score was significantly above or below the expected frequency.

Table 7

Question 10, Post hoc Tests on Significant Differences

Service 8	<i>Extremely important</i>	<i>Important</i>	<i>Slightly important</i>	<i>Not important</i>
<i>Before</i>	Above	Not Significant	Not Significant	Below
Service 13	<i>Extremely important</i>	<i>Important</i>	<i>Slightly important</i>	<i>Not important</i>
<i>Before</i>	Not Significant	Above	Not Significant	Below

Analysis of Question 10, Post hoc Tests on Significant Difference Table

The results of the Before participants' scores for Service 8 - Student veterans' peer-to-peer mentoring were significant in their *Extremely important* and *Not important* selections. The significant finding for the Before sample's *Extremely important* selection was more likely to be observed than expected. Meaning, some of the Before participants felt having a Student veterans' peer-to-peer mentoring service was extremely important to their success in the first year of collegiate studies after their military service. The Before participants also selected *Not important* at a significant rate Below the expected frequency, meaning some did not feel the Student veterans' peer-to-peer mentoring service was important to their success. The Above and Below

significant findings for Service 8 showed the Before sample had different opinions on the Student veterans' peer-to-peer mentoring service.

The Before sample's selections on Service 13 – Student veteran organization/club, follow a similar pattern. The Before participants selected *Important* at a significant rate Above the expected frequency and *Not important* at a significant rate Below the expected frequency. Like the selections for Service 8, the selections for Service 13 showed the Before sample had different opinions on the importance of the Student veteran organization/club service.

Question 11

How many years after your military service did you begin your college coursework?

Responses. (n=282), *0 years* = 96, *< 1 years* = 61, *1 year* = 19, *2-4 years* = 48, *5-10 years* = 34, *10 or more years* = 22, Did not respond = 2

Analysis. The percentage of respondents taking college courses within one year or less of their military service is 56 percent. This percentage is consistent with previous studies that found that most veterans began college coursework soon after military service, suggesting the study obtained a good sample (Olt, 2018; Zoli et al., 2015). When combined with Question 10's results on half of the sample having college coursework prior to their military experience, this study's sample of student veterans appears to value a postsecondary certificate or degree.

For the 140 participants who had some college before their military service (Question 10 responses), the participants selected *0 years* = 59, *< 1 years* = 29, *1 year* = 10, *2-4 years* = 21, *5-10 years* = 11, *10 or more years* = 9, and one Question 10 *Yes* responder "Did not respond" to Question 11. In other words, 70 percent of the participants who had some college before military service began taking college courses within one year or less of their military service. Compared to veterans whose collegiate experience before military service, they were more likely to begin taking college courses within one year of their military service than veterans whose collegiate experience began after their military service. This finding supports previous studies that military

veterans are interested in using their service-accrued entitlements to pursue postsecondary credentials (Olt, 2018; Zoli et al., 2015).

Question 12

What is your age?

Responses. (n=282), *18-19 years old* = 1, *20-29 years old* = 70, *30-39 years old* = 113, *40-49 years old* = 54, *50-59 years old* = 37, *60 years old or more* = 7

Analysis. The responses confirm the participating student veterans as a subgroup of the adult student population (Phillips & Lincoln, 2017; Romero et al., 2015). Dobson et al. (2019) state that the age group with the most members should be the 30-39-year-olds, and the results of this study confirm that statement. Sixty-five percent of the respondents were less than 40 years old, while thirty-four percent were above 40 years old. Of interest, 15 percent of the respondents were 50 years old or more.

Question 13

What is your sex?

Responses. (n=282), *Female* = 83, *Male* = 198, *Did not respond* = 1

Analysis. The percentage of female responses for this survey (29 percent) is consistent with the findings of previous studies that state approximately one-quarter of student veterans are female, suggesting this study collected a representative sample (Bonar and Domenici, 2011; Elliot, 2015).

Female/Male Response Comparison

A number of student veteran studies found that female veterans had different experiences than male veterans (Albright et al., 2019; Bonar and Domenici, 2011; Elliot, 2015; Schiavone and Gentry 2014; Southwell et al. 2018). Guided by the previous findings, this study compared the female responses to the male responses to observe any differences between the sexes. Similar to Question 10's comparison of Before and After participants, the following table compared the Female and Male participants.

Table 8's first column listed the assigned numbers for the 22 campus services participants rated for importance. The second column, Utilized Service, compares the number of the Female and Male samples who selected one of the four importance ratings with the sample's rate of selection in parentheses. The third column compares the Female and Male sample's Importance Score, the weighted mean of their four importance ratings. The fourth column compares the Female and Male sample's Chi-square test results for each service. Significant Chi-square calculations are presented in bold font.

Table 8

Female/Male Response Comparison

Service	Utilized Service		Importance Score		Chi-square test results	
	Female (n=83)	Male (n=198)	Female	Male	Female	Male
1	76 (92%)	187 (94%)	3.57	3.55	82.63	177.3
2	78 (94%)	178 (90%)	3.28	3.15	53.08	67.98
3	78 (94%)	188 (95%)	3.56	3.33	85.49	108.38
4	67 (81%)	149 (75%)	3.12	2.89	20.94	21.34
5	61 (73%)	134 (68%)	3.07	2.69	19.2	11.97
6	75 (90%)	186 (94%)	3.27	3.14	38.12	69.4
7	50 (60%)	129 (65%)	2.68	2.46	1.36	2.32
8	50 (60%)	127 (64%)	2.9	2.57	11.28	10.29
9	76 (92%)	192 (97%)	3.38	3.19	51.89	79.46
10	76 (92%)	190 (96%)	3.38	3.25	51.89	96.44
11	76 (92%)	180 (91%)	3.17	2.78	27.68	11.54
12	78 (94%)	183 (92%)	3.51	3.48	75.64	148.61
13	65 (78%)	154 (78%)	2.89	2.72	9.65	11.14
14	63 (76%)	153 (77%)	2.76	2.46	7.29	0.8
15	79 (95%)	194 (83%)	3.75	3.77	135.94	317.22
16	70 (84%)	171 (86%)	3.33	3.44	44.17	128.53
17	73 (88%)	180 (91%)	3.51	3.51	74.34	159.33
18	56 (67%)	147 (74%)	3.38	3.12	36.14	48.02
19	62 (75%)	149 (75%)	3.35	3.21	41.48	63.32
20	62 (75%)	147 (74%)	3.05	2.78	17.35	9.65
21	66 (80%)	147 (74%)	3.27	3.26	35.7	68.97
22	62 (75%)	135 (68%)	3.19	3.07	27.42	38.07

Analysis of Female/Male Response Comparison

Analysis of the Female/Male Response Comparison looked at how the 83 participants who indicated their sex was Female responded to the twenty-two services differently than the 198 participants who indicated their sex was Male. In the Utilized Services results, The Female sample used nine services at a higher rate than the Male sample. The Male sample used eleven services at a higher rate than the Female sample, and two services were used equally by both samples. The number of services used by more Female or Male samples did not indicate major differences between the two samples. The usage rate differences did have an interesting finding.

Twenty-one of the usage differences between Female and Male samples were seven percent or less, with one service at a 12 percent difference, Service 15 - Assistance with VA educational benefits. Female respondents used Service 15 at a 95 percent rate, and Male participants used the service at an 83 percent rate. The difference in usage rates was interesting and a bit surprising. Because Service 15 had the highest Importance Score for the total sample, the study assumed the Female and Male samples would have used the most important service at a roughly equal high rate. The Importance Score comparison between the Female and Male samples showed a roughly equal rate, 3.75 and 3.77, respectively. Like the Total sample's scores in Table 2, these are the highest scores meaning both the Female and Male samples felt this service was most important to their first year of collegiate studies following military service. The Female sample used Service 15 at a higher rate, while the Male sample rated the service with a higher Importance Score.

This difference between the Female and Male samples is not seen in the other 21 Importance Scores. In that comparison, the Female sample scored 19 services higher than the Male sample, with one service equally scored, Service 17 – Assistance with financial aid benefits. The Male sample only rated two services higher than the Female sample. One is the previously discussed Service 15, and the other is Service 16 – Assistance with non-educational VA benefits. The Male sample rating for Service 16 was 3.44, and the Female sample's rating was 3.33. When

comparing the Utilized Service rates, the Male sample used Service 16 more than the Female sample, 86% for Males and 84% for Females. The Male sample also used Service 17, the equally scored service, at a higher rate than the Female sample, 91% to 88%, respectively.

The three services in the Importance Score comparison column that show an equal or higher score for the Male sample over the Female sample have a common purpose, benefits related to college attendance. The three services, 15 - Assistance with VA educational benefits, 16 - Assistance with non-educational VA benefits, and 17 - Assistance with financial aid benefits, all indicate the Male sample felt benefits assistance was more important than the Female sample. None of the other 19 services, in which the Female sample's Importance Score was higher than the Male sample's, were directly related to benefits related to college. This could indicate that the Male student veteran sample felt more pressure to acquire benefits related to collegiate attendance than the Female sample.

For the Chi-square test results, two of the twenty-two services were not significant for either female or male respondents. The two non-significant services, 7 and 14, Veterans-only orientation/classroom and Dedicated social space for veterans, respectively. The other twenty services were significant for both male and female samples. The significance of those services means that the observed frequency was more likely to be seen than the expected frequency. The Chi-square test results in Table 3, Chi-square Test for Total Sample, showed the same pattern suggesting Services 7 and 14 were considered less important than the other 20 services.

Question 14

What is your preferred mode of taking college courses? (Multiple responses authorized).

Responses. (n=282), *In-person classes* = 109, *Online classes* = 38, *Blended classes: a mix of in-person and online* = 118, *Competency-based classes, in-person or online* = 17

Analysis. The percentages of responses per mode are, *In-person* (39), *Online* (13), *Blended* (42), and *Competency-based* (6). The responses show that 81 percent of the responding student veterans prefer modes that include some face-to-face courses over strictly online courses.

This result breaks with previous studies, Brown and Gross (2011), Olt (2018), and Zoli et al. (2015), that found student veterans preferred *Online classes* over other modes. One explanation for the sample in this study displaying a desire to have at least some face-to-face interaction could stem from the students enduring over one year of online-only experience due to COVID-19 restrictions. Another could be the campuses where the study collected data were good at providing a welcoming classroom environment to student veterans.

Question 15

Are you a first-generation college student?

Responses. (n=282), *Yes* = 156, *No* = 126

Analysis. The results of this study showed 55 percent of responding student veterans indicated they were first-generation students. This result is consistent with previous studies, indicating a valid sample (Fernandez et al., 2019; Karp and Klempin, 2016; Ledesma, 2017; SECond Mission, 2018; Ward, 2019).

Question 16

How would you classify the campus where you are currently taking classes?

Responses. (n=282), *Private, college or university* = 62, *Public, 2-year degrees (e.g. community college)* = 29, *Public, 4-year degrees (e.g. regional or research university)* = 186, *Unknown* = 5

Analysis. The percentages within this dataset do not match the study's anticipated percentages. This dataset's percentages are 22 at a *private institution*, ten at a *community college*, and 66 at a *regional or research institution*. The anticipated percentages were 12 at a *private institution*, 34 at a *community college*, and 54 at a *regional or research university* (Oklahoma State Regents, 2017). It appears student veterans attending community colleges were underrepresented. The cause of this underrepresentation could be that the largest single-site community college in the state declined to assist in distributing the survey.

Section 3 Summary

Seven of the ten biographical datasets obtained in Section 3 relate to findings from previous studies or the study's expectations before collection. The results from Questions 7, 8, 9, 11, 12, 13, and 15, indicate a valid student veteran sample was collected. Question 14's collected data concerning the preferred mode of college coursework was unexpected. Still, the lengthy COVID-19 restrictions might explain why the sample in this study desired at least some face-to-face courses. Question 16's lower than expected rate of student veterans attending two-year institutions could also result from the largest community college in the state not agreeing to assist the study. Question 10 did not have an expected number of responses of student veterans who attended college before their military service or student veterans whose collegiate experience began after their military service. Because 78 percent of the responses obtained in Section 3 aligned with previous student veteran population studies, this study feels a valid sample was obtained.

The comparison analysis conducted for Questions 10 and 13 gained some insight into the differences between two subsets within the total sample of student veterans who participated in this study. Question 10's subset samples were student veterans with college experience before their military service and student veterans whose collegiate experience began after their military service. Both subsets responded to questions about the importance of collegiate services in the first year of college following their military service. Table 6, Before/After College Experience Comparison, showed the comparison results. The two subsets were about equal, with 140 student veterans who had college before their military service and 141 whose collegiate experience began after their military service. In general, the After sample used the 22 campus services more than the Before sample, but the Before sample rated the services as more important to their first year of collegiate studies following military service. This finding indicates the After sample tried different services in search of the ones that provided for their needs, while the Before sample knew what campus services they needed. Campuses should educate incoming student veterans

with no prior collegiate experience about what campus services are available and how the services will assist their transition.

There was a difference between the Before and After sample's Chi-square test results. The Before sample selected Services 8 and 13, Student veterans' peer-to-peer mentoring, and Student veterans organization/club at significant rates, while the After sample did not. The post hoc test showed no discernable pattern with the Before sample's selections as some members of the sample selected *Extremely important* or *Important* above the expected frequencies, and some members selected *Not important* below the expected frequencies.

Question 13 compared student veterans who identified their sex as Female (n=83) to the sample that identified their sex as Male (n=198). Table 7, Female/Male Response Comparison, displays the comparison between the two subsets. There was no pattern in usage rates between the Female and Male samples. There was a pattern in the Importance Score comparison as the Female sample rated 19 services as more important than the Male sample. The Chi-square test results showed no difference in significance between the two groups.

Chapter Four Summary

The study desired and expected a larger sample of student veterans than the initial 381 possible participants who opened the Consent Form. Probable explanations for the lower than the anticipated sample are COVID-19 restrictions causing a depressed response rate among student veterans and end of academic year activities causing institutional offices to not forward reminders to their student veterans. The sample's response rate would likely have been higher with better timing. After Section 1's Consent Form and screening questions, 285 participants continued in Section 2 and rated the importance of twenty-two campus services in Question 5. The number of participants provided a large enough dataset to provide nuanced and meaningful results, allowing the study to confidently state what the sampled student veterans believed were the most important services.

Responses to the survey instrument's primary question, the importance rating of 22 services, were measured using a weighted mean score calculation across the four-point importance scale, *Extremely important* (4), *Important* (3), *Slightly important* (2), and *Not important* (1). A Chi-square test was used to determine which of the importance ratings were statistically significant. Post hoc tests showed the 14 services with the highest Importance Scores had the same pattern of statistical significance. Their *Extremely important* selections were more likely to be observed than expected, and their *Slightly important* and *Not important* selections were less likely to be observed than expected. This pattern can be seen in Table 5, Importance Score and Significant Values. The services that had a similar pattern of significant values, from highest to lowest Importance Score, were: Assistance with VA educational benefits, Admissions / Enrollment assistance, Assistance with financial aid benefits, An office designated to support veterans, Assistance with non-educational VA benefits, Academic advising, Staff who understand military veterans, Counseling services for veterans' issues, Career planning assistance, Faculty who understand military veterans, Academic credit for military service, Employment assistance, Clear academic policies and practices, and Medical services for veterans' issues. All 14 of the services had Importance Scores of 3.1 or higher and should be considered as the most important of the 22 services the sample in this study rated.

The 282 participants who responded to the biographical data in Section 3 of the survey displayed most of the expected results found in previous student veteran studies. Because the biographical results compared favorably to findings in previous studies, the sample's responses in Question 5 likely represented the student veteran population. Additional analysis within Section 3 included comparisons between two subsets within the Total sample. While this additional analysis was not needed to answer the study's research question, the analysis provided a deeper understanding of the Total sample. Question 10 compared student veterans who had college before their military service to student veterans who had college after their military service was

one of the subset comparisons. Regarding the Importance Score, the Before sample generally rated the services higher than the After sample.

Question 13 compared the Female student veterans to Male student veterans. Regarding the Importance Score, the Female sample generally rated the services higher than the Male sample. The statistical analysis for both Questions 10 and 13 found no major differences. Thus, while female student veterans who had college before their military service were more likely to rate campus services as more important than all other student veteran subsets, the ratings were not at significantly different frequencies.

CHAPTER V

SUMMARY AND DISCUSSION

The first chapter of this dissertation introduced the need for this study and the research question, “What campus services do student veterans feel were most important to their academic success during their first year of college-level coursework?”. The second chapter reviewed literature pertinent to the study. Chapter Three discussed the methodology used to collect the data needed to respond to the research question, and Chapter Four analyzed the results of the data collected. This final chapter summarizes the first four chapters and discusses the study’s results, emphasizing practice.

Chapter Roadmap

Chapter Five opens with a summary introduction of student veterans’ studies and the problem statement. The chapter then reviews the methodology by summarizing the instrument used to collect data and insights gained during the collection process. The chapter then summarizes the results using three subsections, importance ratings, biographical results, and an explanation of unanticipated results. The summary portion of the chapter concludes with insights gained from the results.

The chapter then moves to a discussion portion. The discussion opens with the relationship of the current research to previous research. It then discusses the theoretical implications of the study highlighting how the results fit within Schlossberg’s 4-Ss Transition Model. The discussion then provides implications for practice using the same model. Limitations

of the study follow, and the chapter closes with recommendations on what biographical data should be collected in future research and what studies could build upon the results of this study.

Introduction

The United States has a long history of using higher education institutions to accomplish military-related national needs (Jenner, 2017; Remenick, 2019). One need is the transition of wartime veterans back into a peaceful society (Abrams, 1989; Alstott & Novick, 2005; Humes, 2006). The event that accomplished this need, establishing a process for every following generation of the nation's military veterans, was the GI Bill of 1944 (Dortch, 2017a; Morris, 2015, p. 16; Thelin, 2004; U.S. Dept of VA, 2013). The successful transition of millions of World War II veterans back into the nation spurred the pervasive acceptance of human capital theory—investing in citizens' education is the best method for ensuring a strong economy (Blaug, 1976; Holden & Biddle, 2017; Marginson, 2019; Sweetland, 1996). The implicit acceptance of the theory prompted additional federal funding for the postsecondary education of Americans, particularly with the Higher Education Act of 1965 (Morris, 2015; Saez & Zucman, 2016). Accrediting bodies provided oversight and enforcement of the increased federal seed monies to the nation's colleges and universities (Cook, 1998; Hegji, 2017; Holden & Biddle, 2017; Klasik & Hutt, 2019; Oh, 2017; Remenick, 2019). By the twenty-first century, most post-secondary institutions had become reliant upon federal funds, forcing them to meet accreditation requirements (Flores, 2019; Gillen, 2020; Hegji, 2017; Klasik & Hutt, 2019; Oh, 2017).

Federal funding for students connected to the United States Military accounts for ten percent of the annual allocation to accredited institutions in support of less than five percent of the total post-secondary student body (ed.gov, 2017; Worley, 2017; Holian & Adam, 2020). Thus, receiving postsecondary institutions must prove the funds are used appropriately by demonstrating improved degree and certificate attainment. Previous studies show the first year of higher education is the best predictor for attainment (Harackiewicz et al., 2002; Koch et al., 2018; Pellegrino & Hoggan, 2015; Radunzel & Noble, 2012; Semer & Harmening, 2015; van der

Zanden et al., 2019). This study set out to determine what campus services are most important to student veteran success in their first year of collegiate studies following their military service. Knowing what services are most important will assist campuses in supporting their student veterans' attainment needs.

Problem Statement

A reoccurring recommendation in student veteran literature is for campuses to dedicate a single office to support the unique subgroup's access to resources (Bergman et al., 2014; Dillard & Yu, 2016; Green Beauchamp, 2015; Kato et al., 2016). Many campuses have followed that recommendation. What is less commonly found are studies that recommend services the dedicated office should provide. Further, studies that discuss what services campuses should support their student veterans with are not generalizable. Student veteran studies need generalizable research on what campus services maximize collegiate success for student veterans.

A method of defining collegiate success is degree- or certificate-attainment, commonly referred to as *graduation*. This method is consistent with accreditation and policy goals. Numerous studies find that graduation success is highly dependent upon an individual's academic achievement in the first year of collegiate study (Harackiewicz et al., 2002; Koch et al., 2018; Pellegrino & Hoggan, 2015; Radunzel & Noble, 2012; Semer & Harmening, 2015; van der Zanden et al., 2019). Using the first year of college as the primary indicator of collegiate success is consistent with research on student veteran transition. Studies find that leaving the military and entering into a collegiate setting is likely the most difficult transition student veterans experience (Olsen et al., 2014; Smith et al., 2017; Semer & Harmening, 2015; Southwell et al., 2018). Relying on the findings from previous studies, institutions would best serve their student veteran population with a dedicated office that provides services focusing on first-year success. With the right information, campus leaders could prioritize the services that bolster the first-year success of their student veterans.

The question that drove this research was, “What campus services do student veterans feel were most important to their academic success during their first year of college-level coursework?”. By providing generalized results, the study assists post-secondary institutions with methods for improving the support systems for student veterans in their first year. A multi-site study focused on the campus support experiences military service members had in their first year of college studies quantifies what services student veterans felt were most important to their academic success. This dissertation assists in understanding what current services should be prioritized for student veterans.

Summary of the Methodology

This quantitative study relied on a survey instrument to collect data. The instrument was distributed to twenty-five assisting colleges and universities in one Midwestern state over a seven-week period. The assisting campuses agreed to forward an email from the researcher, which contained a link to the survey instrument in exchange for receiving the study’s results. The assisting campuses included ten four-year public universities, nine two-year public colleges, and six private institutions. Fourteen other campuses (six four-year public, five two-year public, and three private institutions) either declined to assist the study or never responded to the research request.

The survey instrument had sixteen questions divided into three sections, and responses were anonymous. Section 1 contained the Consent Form and screened potential participants. Section 2 asked screened participants to rate the importance of twenty-two services identified in previous studies as important to student veterans and followed the rating with an opportunity to write in any services not included in the survey instrument. Section 3 asked ten biographical information questions to help the study determine if the sample accurately represented the population. The past decade’s large number of student veteran studies helped generate the biographical questions and what responses the study should anticipate. Additionally, the biographical responses add to what is known about the population. The instrument was developed

specifically for the study, and as previously discussed in Chapter Four's Instrument Reliability and Validity subsection, the instrument was reliable and valid.

Collection Insights

When calling points of contact at higher education institutions, the researcher found a phone call script was not only useful but necessary (Appendix B, Script of Initial Phone Call to Certifying Officials). Additionally, the spreadsheet used to keep track of the various information on the contacted institutions proved invaluable. The value for the spreadsheet was that the researcher could quickly identify the Midwestern state's postsecondary institutions, their student veteran points of contact, and phone number and email for each of the points of contact. After every discussion, the spreadsheet was updated to indicate the status of the institution's decision about assisting the study and what information the researcher had passed along to the institution. This study does not include the spreadsheet in the appendices to protect the identity of the institutional contacts.

There was a noticeable difference between larger and smaller institutions concerning their decision to assist the study. Larger institutions that routinely conduct research were likely to agree to provide assistance quickly. Smaller institutions were generally hesitant to agree, requiring additional discussion and documentation from the researcher before agreeing to assist. While it makes sense that comfort with research would make a difference in whether an institution would be willing to assist or not, the researcher did not anticipate some of the hesitation levels experienced. An insight into data collection is that not all colleges and universities understand research similarly.

Another collection-related insight gained by the researcher was the value of spreadsheets in working with the collected data. The survey's housing platform, Qualtrics, allows collected data to be downloaded into various spreadsheet formats. The researcher used an Excel format to isolate and compare the collection using pivot tables. The Excel document also allowed the researcher to calculate the measurements used in determining the importance of services

according to the sampled student veterans and what data was significant. The spreadsheet's value in organizing the collected data cannot be understated.

Summary of the Results

The number of potential participants who responded to the collection instrument, an electronic survey, was 381. After completing the survey's Consent Form and screening questions in Section 1, 285 remaining participants were moved to Section 2, where they rated the importance of each service. The number of responses in Section 2 allowed the study to produce delineated calculations for each of the 22 rated services and conduct a valid statistical calculation.

Once participants rated the importance of each service, they were moved to Section 3, where 282 provided biographical responses. The biographical responses were consistent with population expectations gathered from the study's review of previous studies. Because the sampled student veterans accurately represent the expectations, the sample's importance ratings in Section 2 are likely a valid representation of the population. The study conducted a Cronbach's Alpha test to determine the reliability of the survey by measuring the internal consistency of a survey. The value of Cronbach's Alpha for the question was $\alpha = .93$, interpreted as excellent internal consistency meaning the survey instrument was a reliable data collector (Statology, 2021).

In June 2021, the study distributed a preliminary summary of the results to the 25 institutional points of contact who assisted the study by distributing the survey to their institution's student veterans (Appendix G, Summation of Results to Assisting Campuses). In keeping with a post-positivist epistemological stance, the researcher asked the contacts to forward the results to their student veterans to empower the study's participants.

Importance Ratings

The design of the entire collection instrument was to have student veterans respond to Question 5 located in Section 2. The question asked respondents to rate the importance of 22 services. The study's calculation of the importance of each service was called Importance Score,

which calculated the weighted mean responses to the four importance ratings, *Extremely important*, *Important*, *Slightly important*, and *Not important*. The range of scores for each service was four to one, with four representing *Extremely important* and one representing *Not important*. The results of the weighted mean calculations can be seen in Table 2, Importance Score in the Results Chapter.

The study arbitrarily placed the 22 services into three groups, high, middle, and low, using their Importance Score as the determiner to assist with analysis. The high group consisted of services with a weighted mean calculation of 3.4 or higher. This group had six services. From highest to lowest, the six services along with their Importance Score in parenthesis were Assistance with VA educational benefits (3.77), Admissions/enrollment assistance (3.55), Assistance with financial aid benefits (3.51), An office designated to support student veterans (3.48), Assistance with non-educational VA benefits (3.42), and Academic advising (3.40).

The middle group of the Importance Score results had eight services with weighted mean scores that ranged from 3.3 to 3.1. Those services, from highest to lowest score, were Staff who understand military veterans (3.29), Counseling services capable of dealing with veterans' issues (3.27), Career planning assistance (3.26), Faculty who understand military veterans (3.25), Academic credit for military service (3.22), Employment assistance (3.20), Clear academic policies and practices (3.17), and Medical services capable of dealing with veterans' issues (3.12).

The Importance Score's low group had weighted mean scores below 2.9. Those eight services, in order of highest to lowest, were Academic tutoring/support (2.96), Advisors/mentors who are military veterans (2.90), Internet/computer assistance (2.85), Study skills workshops/assistance (2.81), Student veterans organization/club (2.77), Student veterans' peer-to-peer mentoring (2.68), Dedicated social space for student veterans (2.55), and Veterans-only orientation/classroom (2.53).

The study then conducted a Chi-square test for goodness of fit to determine the statistical significance of the Importance Scores. This analysis was appropriate because the research

question's independent and dependent variables are both categorical. Gravetter and Wallnau (2013) state the test measures "how well the obtained sample proportions fit the population proportions specified by the null hypothesis" (p. 594). Because the population's proportions were unknown, the study used the equal proportions null hypothesis option for the Chi-square test instead of the no-difference null hypothesis. The results of the Chi-square test can be seen in Table 3, Chi-square Test for Total Sample, located in the Results Chapter.

The Chi-square test showed that 20 of the 22 rated services had significant selections, meaning the observed selection was more likely than the expected equal proportions frequency. The study conducted a post hoc test to understand where significant selection occurred among the four importance ratings. The results can be seen in Table 4, Post Hoc Test for Significance, located in the Results Chapter. Of the four importance ratings, *Not important* had the most significant selections, with 20 of the 20 services in the post hoc test. The importance rating with the next highest number of significant selections was *Extremely important*, with 18 of the 20 services showing significance. *Slightly important* had the third-highest number with 14, and the *Important* rating had the least number of significant selections, with eight of the services showing significance. While the post hoc test showed where the significant selections occurred, it did not show whether they were significantly above or below the expected frequency, so the study conducted another post hoc test.

The results of the second post hoc can be seen in Table 5, Importance Score and Significant Values, located in the Results Chapter. The table listed the services from highest to lowest Importance Scores in the table's first two columns to understand how the significant scores influenced the Importance Scores. The remaining columns showed whether each of the service's selections was significantly Above or Below the expected frequency or if the selection was not significant. The highest-rated service, Assistance with VA educational benefits, showed a unique distribution of significant selections. The service's *Important* selection was the only one significantly Below the expected frequency. The cause of this unique selection was that so many

of the respondents selected *Extremely important* that there were not enough responses remaining to meet the minimum expected frequency for any of the other three importance ratings. None of the other services had an importance rating so significantly selected that there were not enough selections available to meet the minimum expected frequency for the other ratings. This finding confirms the service with the highest Importance Score, Assistance with VA educational benefits, was the most important service to the first-year success of the student veterans participating in this study.

Biographical Results

Section 3 of the survey instrument asked ten biographical questions, 7 to 16, to inform the study whether the sample represented the student veteran population accurately. The results indicate the collected sample was consistent with the findings expected of the population. Question 7 asked respondents to select their military branch of service. A majority of the respondents, 72 percent, indicated their service was with the U.S. Air Force or Army, confirming the study's expectations because of the preponderance of those military units in the Midwestern state where the study took place.

Question 8 asked respondents to indicate their service's highest level of rank. A majority of responses, 81 percent, selected they were either Enlisted or Non-commissioned officers, meeting the expectations of this study. The other groups, Senior non-commissioned officers and Commissioned officers, are less likely to be current student veterans because their positions require postsecondary credentials. Question 9 asked respondents if their service included combat tours. Sixty percent of the respondents indicated they had combat tours, meeting the expected findings from previous student veteran studies (Barnard-Brak et al., 2011; Eakman et al., 2016; Kato et al., 2016; Southwell et al. 2018).

Question 10 asked participants if they had college experience before their military service. While not a question found in previous studies, the study added the question because the focus on first-year success required the study to know which participants had collegiate

experience before returning to college following their military service. An interesting finding is that roughly half of the sample had college before their military service. The Before sample significantly selected two services that the After sample did not select significantly. The two services were Student veterans' peer-to-peer mentoring and Student veterans' organization/club. The study conducted a post hoc test to determine where the Before sample significantly selected the importance ratings for the two services (see Table 7, Question 10, Post hoc Tests on Significant Differences). The Before sample's significant selections did not show a pattern. Some of the participants selected *Extremely important* or *Important* significantly, and some selected *Not important* significantly. In general, there is no significant difference between the Before and After samples. The results can be seen in Table 6, Before/After College Experience Comparison, in the Results Chapter.

Question 11 asked respondents how soon after their military service they began collegiate-level coursework. The results showed that 56 percent of the sample began college courses within one year or less of their military service, consistent with previous studies (Olt, 2018; Zoli et al., 2015). Question 12 asked participants to provide their age. The responses confirm student veterans as a subgroup of the adult student population where the average age of the subgroup is around the mid-30s (Dobson et al., 2019; Phillips & Lincoln, 2017; Romero et al., 2015).

Question 13 asked for the participant's sex. The results showed 29 percent of the participants were female, which is consistent with the findings of previous studies (Bonar & Domenici, 2011; Elliot, 2015). Because previous studies on female student veterans indicate that portion of the population has a different collegiate experience than male student veterans, a comparison of female responses to male responses was conducted to see if there were any substantive differences (Albright et al., 2019; Elliott, 2015; Pellegrino & Hoggan, 2015). This study found that, in general, females rated services higher than males. However, there were no

significant differences between the female and male samples. Comparison results can be seen in Table 8, Female/Male Response Comparison, in the Results Chapter.

Question 14 asked participants to identify their preferred mode of taking college courses. The responses show that 81 percent of the responding student veterans prefer modes that include face-to-face courses over strictly online courses. This result was unexpected as previous studies found student veterans preferred online classes (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015). Question 15 asked participants if they were first-generation students. The results show 55 percent indicated they are first-generation students, which is slightly less than previous studies' findings but still a majority of participants (Fernandez et al., 2019; Karp & Klempin, 2016; Ledesma, 2017; SECond Mission, 2018). Question 16 asked participants to classify the campus where they were currently enrolled. The responses were 22 percent at a private institution, 10 percent at a community college, and 66 percent at a regional or research institution. These responses indicate an underrepresentation of student veterans attending a community college within the Midwestern state where the study took place (Oklahoma State Regents, 2017).

Explanation of Unanticipated Results

The study anticipated a larger sample of student veterans. One explanation for the lower-than-expected sample was the influence of the COVID-19 pandemic. The survey's distribution occurred thirteen months into the pandemic, meaning students at most of the state's institutions had been taking online-only coursework for over one year. The pandemic forced institutional points of contact for student veterans to rely upon email notifications. During initial discussions with the researcher, multiple certifying officials stated their students would likely not open the email with the survey link because they had "email fatigue."

An additional explanation for the unexpectedly low sample size was the survey instrument's distribution timing. The researcher asked institutional points of contact for assistance at the end of an academic year during April and May. Many higher education offices were preparing for graduation ceremonies and other end-of-academic-year obligations that were more

important to the assisting points of contact. Proof of how the distribution was limited was the paltry 43 views of the YouTube video the researcher asked all points of contact to distribute to the thousands of student veterans at their institutions (Dillman, 2021). It is important to reiterate that although the study did not get the desired sample size, it was large enough to provide delineated results.

Questions 14 and 16 of the survey instrument collected unanticipated data. Question 14 showed that 81 percent of the sample preferred college courses that included some face-to-face courses over strictly online courses, while previous studies found that student veterans preferred online classes (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015). Suppose the institutional points of contact who assisted this study by distributing the survey instrument were correct about student veterans having email fatigue from over one year of electronic-only information exchange. In that case, it is possible that the same student veterans also had online class fatigue. When previous studies found student veterans preferred online courses were conducted, the primary classroom settings for most institutions were likely face-to-face. It is possible the student veteran sample in those previous studies expressed how they would prefer at least some online coursework. Another possibility for the unexpected preference for face-to-face instruction is the Midwestern institutions where the data were collected were military-friendly and did a good job of integrating student veterans into their campuses.

Responses to Question 16 indicate student veterans attending community colleges were underrepresented (Oklahoma State Regents, 2017). The study expected about one-third of participants to come from a community college setting. Instead, it had only 10 percent representation. One explanation for this unexpected result is the understanding that the largest community college in the Midwestern state of study, with about 700 student veterans, declined to assist the study. Another large community college, with about 600 student veterans, agreed to assist the study. The researcher believes the institution's point of contact disregarded requests to distribute the survey instrument to student veterans based on the lack of feedback. It is possible

that because community colleges are often involved in research projects, they may feel external studies as unnecessarily obtrusive (Cragle, 2019; Green Beauchamp, 2015; Heineman, 2016; Karp & Klempin, 2016; Kato et al., 2016; Morrill, 2017; Pellegrino & Hoggan, 2015; Smith et al., 2017; Ward, 2019).

Results Insights

After collecting data and using spreadsheets to group, compare, and calculate the comparisons, the researcher gained additional insight on student veterans from the analyzed results. The primary insight was the sample's importance on assistance with their VA education benefits. The amount of importance the sample placed on Assistance with VA educational benefits as a campus service definitively stood out when compared to the other twenty-one services. Not only did the service have the highest Importance Score, but it also had a unique significant selection of importance ratings (see Tables 2 and 5). The insight gained from this study is how important the sample believed receiving their VA educational benefits was to their first-year success. Assistance in receiving GI Bill educational benefits appears more important than all other services to student veterans. This finding substantiates the study's extended discussion of the GI Bill's history in the Review of Literature Chapter and likely why most other student veteran-related studies include a discussion on the GI Bill.

An additional insight gained from the results of this study was the variety of general and veteran-specific service importance. The Review of Literature showed the uniqueness of student veterans among higher education's student population was unquestioned (Albright & Bryan, 2018; Anderson & Goodman, 2014; Borsari et al., 2017; Canto et al., 2015; Cruise & Misawa, 2019; Lim et al., 2018; Fox Garrity, 2017; Ghosh et al., 2019; Griffin & Gilbert, 2015; Heineman, 2016; Karp & Klempin, 2016; Kirchner, 2015; Olsen et al., 2014; Olt, 2018; Phillips & Lincoln, 2017; Romero et al., 2015; Southwell et al., 2018). However, the results show that there were many general services—services used by all student populations—that student veterans found more important than campus services that focused solely on student veterans. This could be

relevant to campuses that might want to know how to best support their student veteran population with limited resources. The Implications for Practice subsection of the next section, Discussion of Results, will discuss whether services are general to all students or specific to student veterans.

Discussion of the Results

The results of the data analysis confirmed that the sampled student veterans believe some campus services were more important than others to their first-year success. In response to the research question—What services are most important to the success of student veterans in their first year of collegiate studies?—the results show the sample found one service as most important: Assistance with VA educational benefits. This result makes sense when understanding the student veteran population’s uniqueness among the postsecondary student population. The GI Bill is a recruitment tool, meaning many student veterans entered the military with the desire to use their GI Bill benefits (Dortch, 2017; Ledesma, 2017; Wenger et al., 2017). Previous studies find that student veterans are highly likely to use their GI Bill educational entitlements to fund their pursuit of a postsecondary degree or certificate (Callahan & Jarrat, 2014; Dortch, 2017; Hunter-Johnson, 2018; Kirchner, 2015). Those entitlements, which the Veterans Administration manages, require specific policies and procedures that are not well-understood by higher education personnel because of infrequent interaction with the federal agency. Student veterans rely on those funds and need someone at their attending institution to effectively interpret their educational experience with the VA to ensure the institution and the student veteran receive the allocated GI Bill funds.

In addition to Assistance with VA educational benefits, the sample indicated many other services were important to their first-year success. The discussion section focuses on how the services interact with what is known about student veterans and how campuses can use the services to improve student veteran attainment. The following subsections will discuss how the services selected by this study’s sample of student veterans interact with previously known

research and theory and their practical implications for current campuses. Following those subsections, the chapter will conclude with the study's limitations and recommendations for future research.

Relationship of the Current Study to Prior Research

The study's specific goal was to find out what student veterans felt were the most important services during their first year of collegiate studies. The results suggest the study achieved that specific goal. Broadly, the study's goal was to add to what is known about the student veteran population. The results suggest the study also achieved its broad goal. In most cases, the study confirms previous research, but in some cases, the results contradict previous knowledge about the population. This study also collected data not found in previous studies, adding to what is known about the student veteran population.

The specific goal of the study was to find out what campus services student veterans consider most important to their first-year success. Previous student veteran studies have suggested all 22 services listed in the survey instrument's rating question as important to student veterans. This study solicited student veterans to rate each service's importance to assist campuses in prioritizing the 22 services for their student veteran population. The study then calculated the ratings' weighted mean score and called the results Importance Scores. Table 2, Importance Score, located in the Results Chapter, displays each service's weighted mean score. In the table's analysis, the study placed the 22 into high, middle, and low groups to make the analysis easier and to see if the grouping displayed common factors. The study used the Importance Scores to arbitrarily choose the groupings with the high group of services with scores of 3.4 or higher for six services. The middle group of eight services had scores between 3.3 and 3.1, and the eight services placed in the low group had scores below 3.0.

The study then conducted a Chi-square test with two post hoc tests that showed the participants selected the high and middle group services with a consistent pattern of significance. Those 14 services observed *Extremely important* rating was selected significantly above the

expected frequency, and the observed *Slight important* and *Not important* ratings were selected significantly below the expected frequency. Thus, the commonalities of the 14 highest rated services are they have an Importance Score greater than 3.1 on a four-point scale, and the importance ratings were observed to be likely for a service to be more than just important. The study will show how the findings on the highest-rated services specifically relate to previous studies.

The service considered the most important by this sample was Assistance with VA educational benefits with an Importance Score of 3.77. Previous studies that also found this service important were Fox Garrity (2017), Phillips and Lincoln (2017), Queen et al. (2014), and Radford et al. (2016). The service with the second-highest Importance Score was Admissions/enrollment assistance with a weighted mean of 3.55. Previous studies also found this service important for student veterans (Cragle, 2019; Cruise & Misawa, 2019; Fox Garrity, 2017; Ghosh & Fouad, 2016; Hunter-Johnson, 2018; Karp & Klempin, 2016; Olt, 2018; Semer & Harmening, 2015).

The third highest weighted mean was 3.51 and belonged to the Assistance with financial aid benefits service. While other studies found this service important for student veterans, it does not appear to have been as widely studied as other services (Alschuler & Yarab, 2018; Cragle, 2019; Fox Garrity, 2017; Southwell et al., 2018; Ward, 2019). The fourth highest-rated service was An office designated to support student veterans with a 3.48 weighted mean score. This service appears to be the most suggested by previous studies, which is likely why many campuses have moved to a central office. Studies that discuss the need for a designated office include Albright et al. (2019), Alschuler and Yarab (2018), Brown and Gross (2011), Canto et al. (2015), Dillard and Yu (2016), DiRamio and Jarvis (2011), Green Beauchamp (2015), Higher Learning Commission (2018), Lim et al. (2018), Moon and Schma (2011), SECond Mission (2018), and Southwell et al. (2018).

The service with the fifth-highest Importance Score was Assistance with non-educational VA benefits with a 3.42 weighted mean. Non-educational VA benefits are compensation for service-connected disabilities. Many studies have looked at how to assist student veterans with disabilities (Ackerman et al., 2009; Alfred et al., 2014; Barnard-Brak et al., 2011; Barry et al., 2014; Castro & Kintzle, 2014; Church, 2009; Graf et al., 2015; Sayer et al., 2014). A few disability-related studies found that campus counseling and medical services alone were insufficient. Campuses should provide student veterans specialized services targeted to meet their unique needs, such as assistance with the management of service-related disabilities (Canto et al., 2015; Ghosh & Fouad, 2016). The service with the sixth-highest score is Academic advising, with a weighted mean average of 3.40. Previous studies that found this service important to student success include Bailey et al. (2019), Ghosh and Fouad (2016), Huang et al. (2017), Hunter-Johnson (2018), Karp and Klempin (2016), NVEST (2017), Pellegrino and Hoggan (2015), and Remenick (2019).

The service with the seventh-highest weighted mean average was Staff who understand military veterans with an Importance Score of 3.29. Many previous studies also found this service important (Canto et al., 2015; Chua & Evans, 2018; Dillard & Yu, 2016; Jenner, 2017; Zoli et al., 2015). The eighth highest rated service was Counseling services for veterans' issues with a 3.27 Importance Score. A considerable number of previous studies discussed the importance of this service to student veterans (Barnard-Brak et al., 2011; Barry et al., 2014; Cate, 2011; Church, 2009; Eakman et al., 2016).

The ninth highest rated service by the participants was Career planning assistance with an Importance Score of 3.27. The previous studies that discussed the importance of this service include Bergman and Herd (2017), Borsari et al. (2017), Canto et al. (2015), and Hartle (2017). The service with the tenth highest Importance Score at 3.25 was Faculty who understand military veterans. Numerous previous studies discussed the need to improve faculty understanding of

student veterans (Albright & Bryan, 2018; Hunter-Johnson, 2018; Lim et al., 2018; Olt, 2018; VacChi, 2012; Zoli et al., 2015).

The service with the eleventh highest Importance Score was Academic credit for military service with a weighted mean of 3.22. Previous studies that discussed the need to provide academic credit for military service include Cancio (2018) and Ghosh et al. (2019). The twelfth highest rated service was Employment assistance with a 3.20 for an Importance Score.

Employment assistance, the genesis of the 1944 GI Bill, is discussed in many previous studies (Bergman & Herd, 2017; Borsari et al., 2017; Cancio, 2018; Ghosh & Fouad, 2016; Ghosh et al., 2019; Hartle, 2017).

The service with the thirteenth-highest Importance Score was Clear academic policies and practices with a weighted mean of 3.17. A few previous studies also found that clear academic policies and practices were important to student veteran success (Bailey et al., 2019; Karp & Klempin, 2016; Remenick, 2019; NVEST, 2017). The fourteenth rated service and final one for what this study considers important to student veteran success in their first year of collegiate studies are Medical services for veterans' issues with an Importance Score of 3.12. Much of the previous research this study termed, Disability-Related Studies, discussed the need to have campus medical services capable of managing the combat wounds some veterans received (Barnard-Brak et al., 2011; Castro & Kintzle, 2014; Church, 2009; Sayer et al., 2014).

The remaining eight services all have Importance Scores below a weighted mean of 3.0 and did not have the significance selection pattern that indicated the participants felt the service was well above average importance. The eight services with their Importance Score are Academic tutoring/support (2.96), Advisors/mentors who are military veterans (2.9), Internet/computer assistance (2.85), Study skills workshops/assistance (2.81), Student veterans organization/club (2.77), Student veterans' peer-to-peer mentoring (2.68), Dedicated social space for student veterans (2.55), and Veterans-only orientation/classroom (2.53). While previous studies have

discussed the eight services as possibly important to student veteran success, the findings in this study do not warrant a recommendation for campuses to use them.

The broad results from this study mostly confirm previous research on the student veteran population. Previous research suggested the participants to be adult students (Dobson et al., 2019; Phillips & Lincoln, 2017; Romero et al., 2015). The study's sample confirmed this expectation, with the majority selecting that they were between the ages of 30 to 39. Another expectation of this study, based on the past decade's research, was that a majority of the population would have combat tours (Barnard-Brak et al., 2011; Eakman et al. 2016; Kato et al., 2016; Southwell et al. 2018). A majority of this study's respondents, 60 percent, indicated their military service included combat tours, meeting the study's expected results. Another expected result based on previous research was to have most participants begin college coursework very soon after their military service (Olt, 2018; Zoli et al., 2015). This study found that 56 percent of the sample began college courses within one year or less of their military service, consistent with previous studies.

Previous studies indicated about one-quarter of the student veteran population is female (Bonar & Domenici, 2011; Elliot, 2015). Twenty-nine percent of this study's participants indicated they were female, meeting the expected result. The female participants in this study generally selected service ratings as more important than the male participants, suggesting female student veterans' collegiate experience was different from males. This different experience between the two sexes is consistent with previous studies (Albright et al., 2019; Elliott, 2015; Pellegrino & Hoggan, 2015). Another expected finding from previous studies was the expectation that most student veterans are first-generation students (Fernandez et al., 2019; Karp & Klempin, 2016; Ledesma, 2017; SECond Mission, 2018; Ward, 2019). This study's sample met that expectation, with 55 percent of the sample indicating they were first-generation students.

One contradictory result of this study to previous studies was the sample's desire to have face-to-face instruction. Previous studies suggested that most student veterans preferred online classes (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015). This study found that 81 percent of

the sample seemed to prefer some form of face-to-face classes. This chapter's Explanation of Unexpected Results subsection provides some possible explanations for the data, but there is no definitive reason for the contradictory result. While it could be an outlier among student veterans' studies, this study's sample appeared to want physical interaction with other students.

Another contradiction to previous studies bolsters that this study's sample wanted interaction with other student groups. Previous studies suggested that campuses provide student veterans the same services provided to marginalized and minority student populations (Dobson et al., 2019; Jones, 2013; Karp & Klempin, 2016; Rumann & Hamrick, 2009). According to this study's participants, four of the least important services were Student veterans' organization/club, a Student veterans' peer-to-peer mentor, a Veterans-only orientation/classroom, and a Dedicated social space for student veterans. This sample's low ratings of services to marginalized and minority student populations suggests the student veteran participants in this study wanted to be integrated with the rest of the student population.

This study added two results that were not found in the Review of Literature found in Chapter Two. The first result was having the sample indicate their highest military rank. The study asked participants to provide their highest military rank to validate the collected data and begin a discussion on how military rank might influence the student veteran population. Military rank can be divided into five categories: enlisted, non-commissioned officer, senior non-commissioned officer, commissioned officer, and field grade officer. The study expected most participants to select the enlisted or non-commissioned officer categories because those are the military ranks with the lowest post-secondary education requirements. The sample met the expectations of the study, improving the validity of the collected data. The study offered the percentages of each of the five categories to begin a discussion on the influence of military rank. The sample indicated that 33 percent were enlisted, 48 percent were non-commissioned officers, 13 percent were senior non-commissioned officers, 4 percent were commissioned officers, and 2 percent were field grade officers.

The second result that appears to be new to student veterans' studies is whether student veterans attended college prior to their military service. This question was asked because the study focused on student veteran success in the first year of collegiate studies, and a possibility existed that the two groups—college before and college after military service—had different opinions on what services were important. The opinions from this study's before and after military service participants about campus service importance showed no significant differences.

Theoretical Implications of the Study

Chapter Two indicates that student veteran studies implicitly follow human capital theory. Likely influenced by the success of the 1944 GI Bill and solidified in the early 1960s, the theory states investment in the education of a nation's citizenry reaps higher rates of return than investment in the nation's physical components (Blaug, 1976; Holden & Biddle, 2017; Marginson, 2019; Sweetland, 1996). All reviewed literature supported the use of federal funds to provide an educational pathway for student veterans to reintegrate into civilian society.

This study adds to the implicit acceptance of human capital theory in student veteran studies. This study found the most important service campuses should provide to their student veterans was Assistance with VA educational benefits, the very benefits that trace their origination to the GI Bill of 1944. In addition to the study's results on the primary service campuses should offer, the study found no resistance to the question guiding the research. The question—What campus services do student veterans feel were most important to their academic success during their first year of college-level coursework?—appeared to be accepted by the study's numerous assisting institutions and participants. Their acceptance implies implicit approval of human capital theory within the study's collaborating higher education constituents.

In Chapter Two, the study identified five theoretical models used in student veteran studies over the past decade: Adult Studies, Disability-related Studies, Adaptation Studies, Transition Studies, and Identity Studies. Because the research question sought to identify the most important campus services to service members during their transition from the military to

higher education, the first year of collegiate studies, this study was a continuation of Transition Studies. The Transitional Studies theoretical framework is dominated by Schlossberg's Transition Theory and her 4-Ss Model (Ackerman et al., 2009; Bergman & Herd, 2017; DiRamio & Jarvis, 2011; Griffin & Gilbert, 2015; Pellegrino & Hoggan, 2015). The study aligned findings with this well-known theoretical model to inform as many postsecondary institutions as possible of the results and to provide practical methods to support student veteran success.

Schlossberg's 4-Ss model consists of four considerations (situation, self, support, and strategy) for a transitioning adult (Schlossberg et al., 1995). The *situation* is the transitional phase of the adult's location in one of three phases: moving into, moving through, or moving out of the transition (Chickering & Schlossberg, 1995). This study's situation focused on military veterans completing the first year of undergraduate studies or the moving-into phase, which is the period of time required to complete 30 credit hours of college after serving in the military. The moving-through phase is the time required to complete an undergraduate degree or certificate after the first year of college. The moving-out phase is the period of time after completing the undergraduate degree or certificate and beginning a post-collegiate career or graduate degree. Three-fourths of the sample indicated they had completed over 30 credit hours of college credit, meaning most of the sample had *situationally* moved through the moving-into phase of their transition from the military to undergraduate degree holders. Their feedback to this study can assist student veterans *situated* in the moving into phase.

The second "S" in the 4-Ss model is *self*, representing the skills and abilities an adult personally brings to each transitional phase (Schlossberg et al., 1995). Data collected from the sample indicate a high degree of belief or confidence in the skills and abilities required to transition from the military to college graduate status. For example, 70 percent of the sample who had college before military service were likely to begin college within one year of their military service, indicating those student veterans believed they could successfully attain a degree or certificate when they returned to a collegiate setting. Because most respondents identified

themselves as first-generation students, their connection to the military possibly provided the *self*-skills and abilities to pursue an undergraduate degree or certificate. Another indication of *self*-belief was that the median age of the sample was 30-39 years old, suggesting adult-related activity provided the skills needed to pursue and complete a collegiate education.

The third “S” is *support*, meaning what outside resources the adult has during each transitional phase (Schlossberg et al., 1995). *Support* can come from a wide variety of sources, and this study’s primary purpose was to improve understanding of what *support* a campus should prioritize for student veterans. A common finding in previous student veteran studies is for campuses to provide a single office to support the unique subgroup's access to resources (Bergman et al., 2014; Dillard & Yu, 2016; Green Beauchamp, 2015; Kato et al., 2016). What is less commonly found are studies that recommend services the dedicated office should provide, particularly generalizable studies from student veterans’ perspectives. Analysis of collected data showed the participating student veterans felt there were differences in importance to the 22 services they rated. Some campus services were more important than other services. The next subsection of this chapter, Implications for Practice, provides more detail on the differences and which services campuses should prioritize.

Strategy, the fourth “S” in the 4-Ss Model, is the adult's plan to navigate each transitional phase (Schlossberg et al., 1995). Based on the results of this study, the most important *strategy* a student veteran should have for completing the first year of collegiate studies is to know the office that will assist with the veteran’s VA educational benefits. Campuses can assist student veterans’ *strategy* by clearly informing incoming student veterans what campus office will handle their VA educational benefits. Based on the Before/After College Experience Comparison, Table 6, the study suggests the same office also assists student veterans who are entering college for the first time with the other campus services identified as important. This study’s findings suggest such an office will improve student veterans’ *strategy* for successful transition through the moving-into phase of postsecondary education.

Implications for Practice

Because postsecondary institutions rely on federal funding, maintaining accreditation is extremely important to colleges and universities. A summary definition of the accreditation process is an institution showing an external body that it effectively supports its students' pursuit of postsecondary credentials (Flores, 2019; Gillen, 2020; Hegji, 2017; Klasik & Hutt, 2019). Thus, knowing what campus services are most beneficial to supporting their student veterans' educational attainment goals is vital to accreditation and continued access to federal funding. Demonstrating how the quantified results from this study can assist campuses in improving their support to student veterans should assist higher education administrators in maintaining their accreditation requirements. Using Schlossberg's 4-Ss Model for Transition as the communication platform, the following pages will suggest practices that align with the study's results and previous literature.

Situation

The first S in Schlossberg's Model is *situation*. This study relied on previous research to determine the *situation* where campuses should prioritize their assistance. The crucial identity transition from military service member to student veteran occurs in the first year of collegiate studies (Albright et al., 2019; Brown & Gross, 2011; Elliott, 2015; Griffin & Gilbert, 2015; Kato et al., 2016; Lim et al., 2018; Pellegrino & Hoggan, 2015). Additionally, the first year of academic effort seems to be the best predictor of college attainment (Beattie et al., 2018; Chingos, 2018; Koch et al., 2018; Radunzel & Noble, 2012; van der Zanden et al., 2019). Assisting student veterans during their first year of collegiate coursework appears to be the best way to improve the population's attainment goals.

According to this study's results, the most important service was Assistance with VA educational benefits. The researcher can provide a recent, personal example of why this assistance is important to service members transitioning into higher education. In the summer of 2021, the researcher was asked by a family friend to talk to a young man who separated from the

U.S. Marine Corps in early spring 2021. When the researcher talked to the former Marine, he found out the young man was frustrated by trying to enroll in a local university. The young man talked to three different enrollment counselors, and in all three attempts, he was asked to provide his GI Bill paperwork before being allowed to enroll fully. The former Marine talked to three different enrollment counselors because he did not know how to acquire the GI Bill paperwork.

To assist the young man, the researcher contacted the veterans' benefits coordinator at the university where the young man was trying to enroll and asked the coordinator if she would work with the former Marine to get the needed GI Bill paperwork. The coordinator agreed without hesitation. A few weeks later, the young man provided the university's enrollment team with the previously requested GI Bill paperwork and began full-time classes in August 2021. The former Marine reached out to the researcher about the time classes began and thanked him for his assistance.

The *situation* where the former service member needed assistance in transitioning to student veteran status is not unusual. The military trains service members to focus on the primary mission (Alfred et al., 2014; Garcia et al., 2011). For service members transitioning to higher education, the primary mission is to perform at a high standard in an academic setting from which they have probably been away for years (Bergman & Herd, 2017). They are not typically prepared to deal with the institutional bureaucracy commonly found in higher education that requires students to visit multiple offices to complete the documentation needed to begin their academic journey. Forcing service members to deal with the paperwork requirements from multiple offices might help explain why many student veterans feel unsupported and underserved (Bergman & Herd, 2017; Borsari et al., 2017; Canto et al., 2015; Herman & Yarwood, 2014; Jenner, 2017; Jones, 2013; Kirchner, 2015; Lim et al., 2018; Meiners, 2019; Southwell et al., 2018).

Researchers will find many examples of student veteran literature calling for campuses to dedicate a single office to support the unique subgroup (Bergman et al., 2014; Dillard & Yu,

2016; Green Beauchamp, 2015; Kato et al., 2016). Providing the transitioning service members with one office to meet their most important needs lessens the amount of change new student veterans experience. The single office also establishes a sense of care and understanding that encourages the transitioning students to integrate into the campus (Ashforth & Mael, 1989; Dobson et al., 2019; Herman & Yarwood, 2014; Jones, 2013; VacChi, 2012).

Self

Self represents the skills and abilities a student veteran has. Without campus support, student veterans are likely to fail in their degree or certificate attainment attempts (Brown & Gross, 2011; Elliot, 2015; Lim et al., 2018). Academic advising is a service the participants rated as highly important that campuses could provide to improve student veterans' understanding of attainment goals. Huang et al. (2017) found that all students who used academic advisors were four times more likely to graduate. Additionally, student veterans need more academic support than other student populations but are unlikely to ask for academic assistance (Albright & Bryan, 2018; Alschuler & Yarab, 2018; Andrewartha & Harvey, 2019; Bailey et al., 2019; Graf et al., 2015; Karp & Klempin, 2016; Kinney & Eakman, 2017; Lim et al., 2018; NVEST, 2017; Osborne, 2014). The population's reluctance to seek academic advising could be why student veterans attain at the same rates as other student groups, despite their financial and adult activity advantages (Callahan & Jarrat, 2014; NVEST, 2017; U.S. Dept of Education, National, 2020). Campuses that offer a designated office to support veterans with academic advisors could be key to encouraging members to improve their *self*-abilities.

Having academic advising in an office designated for military-affiliated student needs supports previous studies that suggested student veterans have unique requirements for academic success. The suggestions stem from student veterans' perception that faculty and staff, however well-meaning, have misconceptions about the military community (Olt, 2018; Zoli et al., 2015). Because of this belief, student veterans are hesitant to participate in classroom discussions and group projects that involve traditional students (Albright & Bryan, 2018; Hunter-Johnson, 2018;

VacChi, 2012). However, student veterans enjoy working on group projects when they perceive the environment as safe (Lim et al., 2018). Having an advisor that knows which classes allow student veterans to feel safe in their first year of coursework should enhance the academic success of the transitioning service members. Having success in the first year will improve student veterans' confidence in the second S of Schlossberg's Model, *self*.

Support

Some studies have found that when campuses adopt a "Military-Friendly Campus," other campus constituents appear to benefit from student veteran perspectives (Albright & Bryan, 2018; Heineman, 2016). A primary benefit appears to be improved awareness and respect for diversity. Coming from the most diverse organization in the United States, student veterans could greatly assist a campus in building and maintaining a multicultural setting (Atuel & Castro, 2018; Yamada et al., 2013). Not only have student veterans been trained on how to work in a multicultural environment, but they are also likely to have diverse backgrounds themselves. For example, 55 percent of this study's participants indicated they were first-generation students, affirming the findings of previous studies (Fernandez et al., 2019; Karp & Klempin, 2016; Ledesma, 2017; SECond Mission, 2018; Ward, 2019).

Previous studies indicated campuses should provide student veterans the services typically reserved for other marginalized, minority student populations (Dobson et al., 2019; Jones, 2013; Karp & Klempin, 2016; Rumann & Hamrick, 2009). However, this study's participants did not indicate that they preferred to be treated as a marginalized student population. In fact, the participants' four least important services were a student veterans' organization/club, a student veterans' peer-to-peer mentor, a veterans-only orientation/classroom, and a dedicated social space for student veterans. These low-scoring services indicate the participants in this study wanted to acclimate rather than be treated differently from other student groups.

Another indication of this study's participants wanting to acclimate is the unexpected selections to the survey's Question 14, "What is your preferred mode of taking college courses?".

Previous studies suggested that most student veterans preferred online classes (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015). However, this study found that 81 percent of respondents wanted some form of face-to-face classes. This desire of student veterans to interact with other students bolsters the opportunity to improve campus diversity efforts. Campuses could strengthen their mission of educating a multicultural student body by embracing student veterans who come from a culture where the integration of race, gender, and origin are the norm (Ledesma, 2017; Romero et al., 2015). In short, campuses that provide the *support* their student veterans need in attaining a degree or certificate credentials are likely to have an improvement in the institution's diversity-related initiatives.

Strategic

A primary goal of most post-secondary institutions is to maintain accreditation so federal funds can continue to be received (Flores, 2019; Gillen, 2020; Hegji, 2017; Klasik & Hutt, 2019). Colleges and universities are compelled to understand how to assist their students or risk losing the financial support received from government sources. Tied to the passage of the 2017 Forever GI Bill were four additional accreditation requirements meant to curb fraud. Beginning in 2018, campus presidents must agree to support the Principles of Excellence or risk losing their campus' ability to receive GI Bill-related funds (Order, 2012; U.S. Department of Veterans Affairs, 2018). The second requirement was the U.S. Department of Defense (DoD) requirement of campus presidents to sign an annual Memorandum of Understanding or risk losing other military-related funds for students such as tuition assistance (U.S. Department of Defense, 2017; U.S. Dept. of Education, 2020). The third requirement was for institutional veterans' certifying officials to complete annual training. The fourth was for state agencies to conduct annual inspections of institutions receiving VA and/or DoD funds (Dortch, 2018). A portion of the annual inspection requires the institution to demonstrate how students receiving VA or DoD funds are supported.

Demonstrating support to student veterans using accepted research to guide practice is a good method for ensuring these annual inspections are passed. Previous research suggested

having a dedicated office to assist a campus's student veteran population (Bergman et al., 2014; Dillard & Yu, 2016; Green Beauchamp, 2015; Kato et al., 2016). This study's results agree with having a dedicated office for student veterans and other military-affiliated students who receive GI Bill benefits. The participants in this study indicated there were at least 13 services a dedicated campus office could provide.

The 14 most important services, as selected by this study's participants, all have an Importance Score greater than 3.1 on a four-point scale and significant selections in the *Extremely important*, *Slightly important*, and *Not important* selections. The top six services, including a dedicated office, had Importance Scores above 3.4. In the order of highest to lowest, these services were Assistance with VA educational benefits (3.77), Admissions / Enrollment assistance (3.55), Assistance with financial aid benefits (3.51), An office designated to support veterans (3.48), Assistance with non-educational VA benefits (3.42), and Academic advising (3.40). The eight services with Importance Scores between 3.3 and 3.1 were Staff who understand military veterans (3.29), Counseling services for veterans' issues (3.27), Career planning assistance (3.26), Faculty who understand military veterans (3.25), Academic credit for military service (3.22), Employment assistance (3.20), Clear academic policies and practices (3.17), and Medical services for veterans' issues (3.12).

Campuses with an office dedicated to assisting military-related students could begin their relationship with the service members who are entering the college or university during the admissions and enrollment process. The relationship would continue as the office assists the newly enrolled student veterans with their VA educational benefits in conjunction with academic advising necessary to complete the VA educational benefits process. This assistance provides support for four of the top six services rated as most important by the participants in this study. The two other services in the top six Importance Scores, assistance with financial aid and VA non-educational benefits, are services the dedicated office could also assist. The office could direct the newly enrolled student veterans to the campus' financial aid office and local veterans'

organizations that assist with non-educational VA benefits, such as the Department of Veterans Affairs.

The dedicated office could also assist with any of the next eight most important services, which had Importance Scores between 3.3 and 3.1. For example, the office's staff should be composed of former military members who understand veterans' issues. The staff could direct the newly enrolled student veterans to the office or clinic where they can get counseling and/or medical treatment for any veterans' issues they may have. The office can direct the student veterans to the office that can assist them with career planning and/or employment assistance. During academic advisement, the office's staff could suggest that the student veterans take courses with faculty members who understand or are sensitive to veterans' issues. Finally, the office's staff can work with the institution's Registrar to ensure the student veterans get clear academic policies and procedures as well as academic credit for their military experience. Campuses that dedicate an office to support their military-affiliated student population will improve student veteran retention and attainment goals (Bergman et al., 2014; Dillard & Yu, 2016; Green Beauchamp, 2015; Kato et al., 2016). This study suggests campuses begin support with establishing a relationship as soon as the student veteran begins the admissions and enrollment process. The campus should continue developing the relationship by providing the services student veterans felt were most important to them or ensuring the student veterans have access to the office/organization that can best serve them. This study suggests there are 13 services a dedicated office should provide or assist in providing. Demonstrating support using accepted research and improved attainment is the best method for maintaining accreditation, *strategically* ensuring the institution has continued access to the DoD and VA federal funds tied to student veterans.

Limitations

This study's results are generalizable, but there are limitations. An obvious limitation is the study was conducted in only one state. The biographical results are consistent with results

from other studies, suggesting this study's participating student veterans were a valid sample of what is known about the population. However, because the sample came from student veterans attending a college or university in one Midwestern state, the opinions expressed by the sample may not represent the national population.

Another limitation to the generalizability of the study is the low number of community college student veterans who participated. As previously stated in this chapter's Explanation of Unexpected Results subsection, about one-third of sampled student veterans should have come from a community college. The sample only had ten percent of participants from community colleges. While the service ratings of community college participants do not appear to be inordinately different from the rest of the sample, additional student veterans from two-year public institutions may have influenced the service's ratings of importance.

In addition, the study's reliance on institutional points of contact to access the sample is a limitation. As previously discussed in the Explanation of Unexpected Results subsection, reliance on certifying officials to distribute the survey instrument to their institution's student veterans likely caused a smaller-than-desired sample. While the sample was large enough to provide delineated results, a larger sample would have strengthened the study's results.

Recommendations for Further Research

The student veterans participating in this study felt that some campus services were more important to their first year of collegiate studies than other services. The participants selected Assistance with VA educational benefits as the most important service, with thirteen others as important to their success during the first year of college following military service. Future studies could build upon the data collected in this study, providing colleges and universities richer data for their decision-makers to prioritize services to student veterans. This section suggests what biographical information future studies may consider collecting and some possible future studies that would build on this study.

Biographical Data Collection

Based on this study's new data, future studies should collect two pieces of additional biographical information from student veterans. Adding the two new pieces to future studies would allow broader discussions on how campuses could satisfactorily support the student veteran population. The first piece of additional information future studies should collect is the student veteran's highest military rank. This study asked participants for their military rank to collect a valid sample. Having a baseline of data on military rank might allow future studies to inquire whether the level of service directly influences student veteran activity and what services are important to the population.

The study's second new information piece was whether the student attended college before or after their military service. The results from this question showed half of the participants had college experience before their military service; however, their rating of campus services had little variance when compared to the other half, whose collegiate experience came after military service. Future studies may find significant differences between student veterans who attended college before to those who attended college after military service. The sample with college before their military experience generally rated the 22 services as more important than the sample whose college experience began after their military service. This study did not find explainable differences between the compared samples. Future studies may find significant differences between student veterans who had college experience before their military service to those who began college after military service only, which could improve the assistance colleges and universities provide to incoming student veterans. Knowing how many student veterans attend college before serving in the military warrants further exploration. Additional exploration may conclude that the bonds between the military and higher education are even more intertwined than the study's Review of Literature suggested.

In this study's comparison of female and male samples, an example of how having college before military service might influence results was demonstrated. The majority of the

female student veterans who participated in this study had collegiate experience before serving in the military. Of the 83 participating females, 64 percent attended college before their military service. Previous studies suggest female student veterans' collegiate experience is different from males (Albright et al., 2019; Elliott, 2015; Pellegrino & Hoggan, 2015). Future studies that delineate male and female student veteran experiences will likely find differences between the two groups. Those same future studies could explore if the different experiences have anything to do with college experience before military service.

Other biographical information collected in previous studies could be a focus for future studies. The first biographical data that could be of interest to future studies is student veteran age. Thirty-four percent of this study's participants were 40 years of age or more, and 15 percent were 50 years of age or older. While the study anticipated the sample to primarily be adult students, future studies considering the age of student veterans might be interested in knowing how the difference between the average student veteran age of 34 and the traditional student age of 20 might influence student veteran attainment (Dobson et al., 2019).

The second result from this study that future studies might consider an important biographical data piece to collect is classroom preference. Based on previous studies, this study anticipated most participants to select online classes as their preferred mode of postsecondary coursework (Brown & Gross, 2011; Olt, 2018; Zoli et al., 2015). Instead, 81 percent of participants selected in-person classes and/or blended classes as their preferred mode of taking college courses. The fact that this study was conducted one year into the COVID-19 pandemic might have been the cause for the unexpected result. However, future studies could explore if the prevailing attitude about collegiate course delivery options changes and why among the student veteran population.

Building on This Study

Section Three of the Results Chapter had two comparison tables, Tables 6 and 8, that compared two subsets within the total sample collected by this study. Table 6 compared

participants with college experience Before their military service to those whose collegiate experience was After their military experience. Table 8 compared the participants who selected Female as their sex to those who selected Male. Future studies could compare any of the biographical subsets within the study. Additionally, those future studies could use other statistical analyses, such as an independent t-test, to make the comparisons.

A future study that builds upon this study could compare institutions with and without the services this sample found most important. The study could compare the two groups' attainment rates and compare them to the average national rates of 55-60 percent (Callahan & Jarrat, 2014; NVEST, 2017; U.S. Dept of Education, National, 2020). The study would need to find the graduation rates of student veterans from schools with an office dedicated to offering services for military-affiliated students. Then, find the student veteran graduation rates from similar schools that do not offer those services uniquely to student veterans. The attainment rates from both groups of schools might indicate whether the dedicated office positively influences attainment rates.

Conducting the study at one school might be another option for future studies. A one-campus study might encourage responses from student veterans who are part of higher education's hidden communities. For this study, institutional points of contact generally relied upon distribution lists for student veterans and military-affiliated students using VA educational benefits. However, some student veterans do not use their VA educational benefits (National Center for Veterans Analysis and Statistics, 2020; U.S. Department of Veterans Affairs, 2020). This group could be considered a hidden community because the institutions they attend may not track them as student veterans, meaning this community was likely not offered the opportunity to respond to this study's survey. Conducting the study at one institution might allow for multiple data collection methods, providing more opportunities for student veterans in the hidden community to offer their opinions on what service is most important to the academic success of their first year.

Conversely, expanding this study to more than one state would allow for the collection of more student veteran opinions on the important campus services during their transitional, first year of collegiate studies. Distributing the collection instrument would depend on how many institutions the future study would want to include. The future study could contact institutional veterans' certifying officials as this study did or use a pre-existing organization such as Student Veterans of America (SVA). Either way, getting the collection instrument to student veterans is key to a valid study that focuses on the population's opinion.

In the survey instrument's write-in question, ten of the participating student veterans suggested additional services for student veterans to rate as important. Future studies that build on this study might consider including one or more of these services. Four of the ten services were, "A low sensitivity room for those that need space to relax or reduce stress," "Meditation or yoga classes or gym buddies," "University events focused on veterans," and "Veteran recognition with a graduation cord or stole." Three of the ten services were financially related, "Discount on books," "Quick bill pay services for Veteran Affairs to obtain an official transcript," and "Scholarship application assistance." The final three services involve academic-related activity, "Military scheduling," "Veterans Upward Bound," and "Waiving traditional admission testing (ACT/SAT)." None of the write-in services was listed more than once, which is why this question was not addressed earlier in the chapter.

Summary

The Post-9/11 GI Bill of 2009 dramatically increased the investment of federal funds that support student veterans to leave the military and use postsecondary educational institutions as the means of gaining desirable skills for the civilian workforce. The increased investment spurred additional accreditation requirements affecting every college and university that receives federal funds for their student veterans. Accrediting bodies enforce policies meant to improve students' degree or certificate attainment. This study assists institutions in maintaining accreditation requirements in two ways. First, the study explains why student veterans are a unique subgroup

within the postsecondary student population. Second, the study uses a generalizable, quantitative methodology to determine the best services to support the subgroup's attainment goals.

Previous studies found the first year of collegiate study crucial in determining whether student veterans will attain a degree or certificate. Therefore, this study distributed a cross-sectional survey in a Midwestern state that asked student veterans to rate the importance of twenty-two campus services during their first year of collegiate studies. The calculation used to determine the importance of the rated services was a weighted mean score followed by a Chi-square test to determine statistical significance. The study then relied on Schlossberg's widely accepted Transition Model to discuss the services campuses should prioritize for their student veterans. Likely due to the impact of the GI Bill, the most important service a campus should provide to the unique subgroup is assistance with their VA educational benefits. For campuses prioritizing services for their student veterans, this study suggests an office designated for military-affiliated students that assists with VA educational and non-educational benefits, admissions and enrollment requirements, and academic advising.

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APPENDICES

APPENDIX A: OSU IRB-Approval Letter



Oklahoma State University Institutional Review Board

Date: 03/31/2021
Application Number: IRB-21-179
Proposal Title: Supporting the Academic Success of First-Year Student Veterans

Principal Investigator: Ray Dillman
Co-Investigator(s):
Faculty Adviser: Steve Wanger
Project Coordinator:
Research Assistant(s):

Processed as: Exempt
Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRB Manager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
1. Report any unanticipated/adverse events to the IRB Office promptly.
2. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744- 3377 or irb@okstate.edu.

Sincerely,

Oklahoma State University IRB

APPENDIX B: Script of Initial Phone Call to Certifying Officials

This is the script the researcher used in the initial phone call to 39 institutions in the Midwestern state where the study was conducted.

School _____

Date _____

Hi _____. My name is Ray Dillman. I am a PhD student at Oklahoma State University and am leading a statewide study to determine what student veterans believe are the most important campus services to achieving academic success in their first year of postsecondary studies.

I am calling to see if you might be interested in assisting with the study. If so, you will receive the results of the study sometime this July.

The assistance you will provide is forwarding an email containing a survey link to your student veteran distribution list.

Before I send that email, I would like to send you an email that explains the study in more detail, and provides documentation showing how your institution and your student veterans will maintain anonymity should you decide to assist.

Could I send you that email?

Email address of official: _____

Please anticipate an email from me, Ray.Dillman@okstate.edu, within the next half hour.

Should you decide to assist, and I hope you will, let me know by replying to my informational email, and I will send you the email with the survey link that you can forward to your student veterans.

APPENDIX C: Initial Email to Possible Assisting HEIs

This is the general email format the researcher sent to each of the colleges and universities following an initial phone call or, on rare occasions, a voice message was left.

Hi (First Name).

Thank you for taking my call a few minutes ago. As I stated, I am requesting your office's assistance with a statewide study on student veterans.

The request is to have your office forward a survey to the student veterans your office assists. This survey will inform interested parties of what campus services are most important to student veterans during their first year of collegiate studies. The study seeks input from all student veterans in Oklahoma, and results will be shared with the institutions that assist in the survey's distribution.

The survey does not collect data on your institution or personally identifiable information from participating student veterans. All parties maintain anonymity. For your inspection, I have attached three items:

1. A pdf copy of the survey's format and questions.
2. The Approval Letter from the Oklahoma State University's Institutional Research Board.
3. The email I will send to you should you agree to distribute the survey to your student veterans. I will ask you to forward the email to your student veterans.

Please let me know if your office will assist in the survey's distribution. If so, I will send you the email you can forward to your institution's student veterans. Study results will be shared this July.

Do not hesitate to contact me if you or anyone else from your institution has questions or concerns.

Thank you,

Ray

--

Ray Dillman

Ph.D. Candidate, Educational Leadership and Policy Studies

College of Education and Human Sciences, Oklahoma State University

405.763.9695

APPENDIX D: Initial Email to Potential Participants

This was the initial email from the researcher to student veterans. The email was sent from the researcher to points of contact at colleges and universities once they agreed to assist the study. The points of contact then forwarded the email to their campus's student veterans. This email's distribution ran from April 13th to early May, 2021.

Dear Student Veteran,

After 23 years of service, I retired from the military in 2013. I am now working at a local university and am conducting a statewide study on how to best support student veterans during their first year of collegiate studies. Your response to [this five-minute survey](#) will inform colleges and universities on student veterans' needs.

Thank you,
Ray

--

Ray Dillman
Ph.D. Candidate, Educational Leadership and Policy Studies
College of Education and Human Sciences, Oklahoma State University
405.763.9695

APPENDIX E: May 6th Reminder Email to Student Veterans

This is the reminder email sent to the potential student veterans who could participate in the study. The email was sent to points of contact at the state's 25 assisting institutions and forwarded to the institution's student veteran population.

Dear Student Veteran,

Recently, an official from your institution forwarded an email from me that asked you to participate in a statewide study on how to best support student veterans during their first year of collegiate studies. If you participated, thank you. If you have not yet responded to [the survey](#), please do so now.

There are 25 colleges and universities in the State of Oklahoma participating in this study. Each of those schools will receive the study's results later this summer. The more student veterans who participate in the study, the more meaningful the results will be, making it more likely that our veteran brothers and sisters receive quality services. So, by May 15th, please take five minutes to participate in [this concise survey](#).

Feel free to reach out to me if you have any questions.

Thank you,

Ray

--

Ray Dillman

ray.dillman@okstate.edu

Ph.D. Candidate, Educational Leadership and Policy Studies

College of Education and Human Sciences, Oklahoma State University

405.763.9695

APPENDIX F: Survey Instrument

This is the survey instrument used to collect data from April 5 to May 31, 2021.

The instrument's third-party software is Qualtrics. The survey and data collected during the study is housed in the researcher's Qualtrics account.

Name - Student Veterans Use of Campus Services

Start of Block: Consent

Consent

Consent Form - Student Veterans' Use of Campus Services

Participation Request - Your participation in the Student Veterans' Use of Campus Services study is requested. The purpose of the study is to determine the campus services that veterans find most important during their first year of college after beginning military service. Participation is limited to completing this short, 16-question survey (less than 5 minutes). You are not obligated to respond to the survey, but please read the remainder of this consent form before agreeing to take part in the study. Please only participate in this survey one time as multiple responses from the same individual will skew the results.

Risks - There are little to zero risks for your participation in the study. All survey responses are anonymous, and outside of a few broad biographical questions, the survey does not ask for personally-identifying information. Your answers will be anonymous, and the records of this study will be kept confidential. In any public reports of this study, no self-identifying information of the participants will be included.

The research team works to ensure confidentiality to the degree permitted by technology. It is possible, although unlikely, that unauthorized individuals could gain access to your responses because you are responding online. However, your participation in this online survey involves

risks similar to a person's everyday use of the internet. If you have concerns, you should consult the survey provider privacy policy at <https://www.qualtrics.com/privacy-statement/>.

Benefits - The study's potential benefit is an improvement of services for student veterans and other military-affiliated students attending college. There is no direct benefit or compensation to you for responding to the survey.

Researcher - The researcher conducting this study is Ray Dillman, a retired military veteran who is completing his Ph.D. degree in Educational Leadership and Policy Studies at Oklahoma State University. If you have questions about this study, you may contact Ray at ray.dillman@okstate.edu. Dr. Steve Wanger oversees Ray's research and can be contacted at steve.wanger@okstate.edu. The Oklahoma State University's Institutional Review Board (OSU IRB) approved this study. If you have questions about your rights as a research volunteer or would simply like to speak with someone other than the research team about concerns regarding this study, please contact the OSU IRB at (405) 744-3377 or irb@okstate.edu. All reports or correspondence will be kept confidential.

By selecting the "Yes, I consent" button below, you agree to participate in this study.

- Yes, I consent
- No, I do not consent

Skip To: End of Survey If Consent Form - Student Veterans' Use of Campus Support Services Participation Request - Your p... = No, I do not consent

End of Block: Consent

Start of Block: Participant Screening

Q1 Have you served in the United States Military?

(Military service is Active Duty, National Guard, or Reserve duty in the Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force)

- Yes
- No

Skip To: End of Survey If Have you served in the United States Military? (Military service is Active Duty, National Guard... = No

Q2 Are you currently enrolled (within one year) in college-level classes?

- Yes
- No

Skip To: End of Survey If Are you currently enrolled in college-level classes? = No

Q3 Estimate the number of college credits earned after beginning military service.

- Fewer than 30 credit hours
- 30 credit hours or more
- None - all my college experience was prior to my military service

Skip To: End of Survey If Estimate the number of college credits earned after beginning military service. = None - all my college experience was prior to my military service

Q4 How many total credit hours have you completed, including those earned prior to your military service?

- Fewer than 30 college credit hours completed
- 30 to 59 college credit hours completed
- 60 to 89 college credit hours completed
- 90 or more college credit hours completed
- College graduate / Baccalaureate degree completed
- Graduate student

End of Block: Participant Screening

Start of Block: Campus Services Rating

Q5 This section lists veterans' services commonly found at colleges and universities. Rate how important each of the following offices or services were to you in completing your first year of

collegiate courses during or following your military service. There are options available if you did not use the service or did not have the service at your institution.

	Extremely important	Important	Slightly important	Not important at all	Did not use service	Does not apply / Service not available
Admissions / Enrollment assistance						
Academic credit for military service						
Academic advising						
Academic tutoring / support						
Study skills workshops / assistance						
Clear academic policies and practices						
Veterans-only orientation / classroom						
Student veterans' peer-to-peer mentoring						
Faculty who understand military veterans						

Staff who understand military veterans						
Advisors / mentors who are military veterans						
An office designated to support student veterans						
Student veterans organization / club						
Dedicated social space for student veterans						
Assistance with VA educational benefits						
Assistance with non-educational VA benefits						
Assistance with financial aid benefits						
Employment assistance						
Career planning assistance						

Internet / computer assistance						
Counseling services capable of dealing with veterans' issues						
Medical services capable of dealing with veterans' issues						

Q6 Were there any campus services not listed in the survey that you found important during your first year of college coursework during or following military service? If so, please write the service(s) in the space provided.

End of Block: Campus Services Rating

Start of Block: Biographical information

Q7 What military branch have you served in? (Multiple responses authorized)

- U.S. Air Force
 - U.S. Army
 - U.S. Coast Guard
 - U.S. Marine Corps
 - U.S. Navy
 - U.S. Space Force
-

Q8 What is the highest military rank you attained?

- Enlisted, E1 to E4
 - Non-commissioned officer, E5 to E6
 - Senior non-commissioned officer, E7 to E9
 - Commissioned officer, O1 to O3
 - Field grade officer, O4 to O6
-

Q9 Did your military service include any combat tours?

- Yes
 - No
-

Q10 Did you attend college prior to your military service?

- Yes
 - No
-

Q11 How many years after the start of your military service, did you begin your college coursework?

- 0 years. I began college coursework prior to or during military service.
 - < 1 years. I began college coursework within one year of leaving military service.
 - 1 year. I began college coursework one year after leaving military service.
 - 2-4 years. I began college coursework two to four years after leaving military service.
 - 5-10 years. I began college coursework five to ten years after leaving military service.
 - 10 or more years. I began college coursework ten or more years after military service.
-

Q12 What is your age?

- 18-19 years old
 - 20-29 years old
 - 30-39 years old
 - 40-49 years old
 - 50-59 years old
 - 60 years old or more
-

Q13 What is your sex?

- Male
 - Female
-

Q14 What is your preferred mode of taking college courses? (Multiple responses authorized)

- In-person classes
 - Online classes
 - Blended classes: a mix of online and in-person
 - Competency-based classes: allowing students to complete classes on their own timeline
-

Q15 Are you a first-generation college student?

- Yes
 - No
-

Q16 How would you classify the campus where you are currently taking classes?

- Public, 2-year degrees (e.g. community college)
- Public, 4-year degrees (e.g. regional or research university)
- Private, college or university
- Unknown

End of Block: Biographical information

APPENDIX G: Summation of Results to Assisting Campuses

Distributed to the twenty-five assisting campuses on June 18, 2021.

Survey Results - Important Campus Services to Student Veterans

This document contains the results of a statewide study that sought to determine what campus services are most important to the success of student veterans in their first year of collegiate studies. Data collection was accomplished with a survey instrument titled Student Veterans' Use of Campus Support Services. Following a pilot test, the survey was distributed from mid-April through May 31, 2021. Distribution to student veterans went through points of contact at twenty-five colleges and universities in Oklahoma that agreed to assist by forwarding the survey link to their student veterans. Survey responses were anonymous.

The survey had 16 questions, but the primary question of the survey and study (Question 5) asked student veterans to rate twenty-two campus services. The results of those ratings are presented first in the Importance Score Table. The results from the survey's other fifteen questions (1-4, 6-16) follow the Summary Analysis of the Importance Score Table.

Question 5 - This question lists veterans' services commonly found at colleges and universities. Rate how important each of the following offices or services were to you in completing your first year of collegiate courses during or following your military service as *Extremely important*, *Important*, *Slightly important*, and *Not important*. There are options available if you *Did not use the service* or *Did not have the service available* at your institution.

Importance Score Table

- The Service column lists the services that 285 student veterans rated. The service's number is the order it was displayed in the survey.
- The # Utilizing Service column shows the number of responses per the importance scale, *Extremely important* + *Important* + *Slightly important* + *Not important*.
- The Importance Score column finds the mean for each service and determines the order of services in this table from highest to lowest.
- The # Did not use column shows the number of participants who *Did not use the service*.
- The last column shows the respondents who *Did not have the service available*.

Service (n = 285)	# Utilizing Service	Importance Score (mean score 1-4)*	# Did not use	# Not Available
15 - Assistance with VA educational benefits	221+49+5+2= 277 (97.2%)	$[(221*4)+(49*3)+(5*2)+(2*1)]/277= \mathbf{3.8}$	5 (1.8%)	3 (1.1%)
1 - Admissions / Enrollment assistance	168+83+11+5= 267 (93.7%)	$[(168*4)+(83*3)+(11*2)+(5*1)]/267= \mathbf{3.6}$	15 (5.3%)	3 (1.1%)

12 - An office designated to support veterans	162+75+22+6=265 (92.9%)	$[(162*4)+(75*3)+(22*2)+(6*1)]/265 = 3.5$	16 (5.6%)	4 (1.4%)
17 - Assistance with financial aid benefits	164+66+22+5=257 (90.2%)	$[(164*4)+(66*3)+(22*2)+(5*1)]/257 = 3.5$	20 (7.0%)	8 (2.8%)
3 - Academic advising	147+92+23+8=270 (94.7%)	$[(147*4)+(92*3)+(23*2)+(8*1)]/270 = 3.4$	10 (3.5%)	5 (1.8%)
16 - Assistance with non-educational VA benefits	143+68+27+7=245 (85.9%)	$[(143*4)+(68*3)+(27*2)+(7*1)]/245 = 3.4$	29 (10.2%)	11 (3.9%)
9 - Faculty who understand military veterans	142+73+38+18=271 (95.1%)	$[(142*4)+(73*3)+(38*2)+(18*1)]/271 = 3.3$	6 (2.1%)	8 (2.8%)
10 - Staff who understand military veterans	146+75+29+19=269 (94.4%)	$[(146*4)+(75*3)+(29*2)+(19*1)]/269 = 3.3$	8 (2.8%)	8 (2.8%)
19 - Career planning assistance	97+81+32+5=215 (75.4%)	$[(97*4)+(81*3)+(32*2)+(5*1)]/215 = 3.3$	59 (20.7%)	11 (3.9%)
21 - Counseling services for veterans' issues	106+75+25+11=217 (76.1%)	$[(106*4)+(75*3)+(25*2)+(11*1)]/217 = 3.3$	54 (18.9%)	14 (4.9%)
2 - Academic credit for military service	138+63+36+23=260 (91.2%)	$[(138*4)+(63*3)+(36*2)+(23*1)]/260 = 3.2$	19 (6.6%)	6 (2.1%)
6 - Clear academic policies and practices	115+95+41+14=265 (92.9%)	$[(115*4)+(95*3)+(41*2)+(14*1)]/265 = 3.2$	15 (5.3%)	5 (1.8%)
18 - Employment assistance	92+71+35+8=206 (72.3%)	$[(92*4)+(71*3)+(35*2)+(8*1)]/206 = 3.2$	67 (23.5%)	12 (4.2%)
22 - Medical services for veterans' issues	94+58+29+20=201 (70.5%)	$[(94*4)+(58*3)+(29*2)+(20*1)]/201 = 3.1$	63 (22.1%)	21 (7.4%)
4 - Academic tutoring / support	81+65+56+17=219 (76.8%)	$[(81*4)+(65*3)+56(*2)+(17*1)]/219 = 2.9$	60 (21.1%)	6 (2.1%)
11 - Advisors / mentors who are military veterans	99+70+55+35=259 (90.9%)	$[(99*4)+(70*3)+(55*2)+(35*1)]/259 = 2.9$	13 (4.6%)	13 (4.6%)
20 - Internet / computer assistance	73+64+48+28=213 (74.7%)	$[(73*4)+(64*3)+(48*2)+(28*1)]/213 = 2.9$	57 (20.0%)	15 (5.3%)
5 - Study skills workshops / assistance	62+57+59+20=198 (69.5%)	$[(62*4)+(57*3)+(59*2)+(20*1)]/198 = 2.8$	76 (26.7%)	11 (3.9%)
13 - Student veterans organization / club	66+71+54+31=222 (77.9%)	$[(66*4)+(71*3)+(54*2)+(31*1)]/222 = 2.8$	52 (18.2%)	11 (3.9%)
8 - Student veterans' peer-to-peer mentoring	52+46+54+28=180 (63.2%)	$[(52*4)+(46*3)+(54*2)+(28*1)]/180 = 2.7$	74 (25.9%)	31 (10.9%)

7 - Veterans-only orientation / classroom	51+40+45+46= 182 (63.9%)	$[(51*4)+(40*3)+(45*2)+(46*1)]/182= 2.5$	58 (20.4%)	45 (15.8%)
14 - Dedicated social space for student veterans	59+54+54+52= 219 (76.8%)	$[(59*4)+(54*3)+(54*2)+(52*1)]/219= 2.5$	48 (16.8%)	18 (6.3%)

Summary Analysis: The Importance Score column shows the mean score calculation and the results of the calculations, which are listed from highest to lowest. All mean scores range from 2.5 to 3.8 on a 4-point scale. The Scores can be grouped into three levels using the four-point scale.

The top group has four services with a mean of greater than or equal to 3.5. Assistance with VA educational benefits (3.8), Admissions / Enrollment assistance (3.6), An office designated to support student veterans (3.5), and Assistance with financial aid benefits (3.5).

The middle ten services all have a mean score between 3.0 to 3.4. Academic advising (3.4), Assistance with non-educational VA benefits (3.4), Faculty who understand military veterans (3.3), Staff who understand military veterans (3.3), Career planning assistance (3.3), Counseling services capable of dealing with veterans' issues (3.3), Academic credit for military service (3.2), Clear academic policies and practices (3.2), Employment assistance (3.2), and Medical services capable of dealing with veterans' issues (3.1).

The low eight services have mean scores ranging from 2.5 to 2.9. Academic tutoring/support (2.9), Advisors/mentors who are military veterans (2.9), Internet / computer assistance (2.9), Study skills workshops/assistance (2.8), Student veterans organization/club (2.8), Student veterans' peer-to-peer mentoring (2.7), Veterans-only orientation/classroom (2.5), and Dedicated social space for student veterans (2.5).

Question 1 - Have you served in the United States Military? (Military service is Active Duty, National Guard, or Reserve duty in the Army, Navy, Air Force, Marine Corps, Coast Guard, or Space Force).

Responses. (n = 377), *Yes* = 347, *No* = 28, Did not respond = 2.

*The *No/None* and “Did not respond” responses for Q1-3 were removed from the survey.

Question 2 - Are you currently enrolled (within one year) in college-level classes?

Responses. (n = 347), *Yes* = 322, *No* = 24, Did not respond = 1

Question 3 - Estimate the number of college credits earned after beginning military service.

Responses. (n = 322), *Fewer than 30 credit hours* = 64, *30 credit hours or more* = 247, *None, all my college experience was prior to my military service* = 8, Did not respond = 3

Question 4 - How many total credit hours have you completed, including those earned prior to your military service?

Responses. (n = 311), *Fewer than 30 college credit hours completed* = 47, *30 to 59 college credit hours completed* = 35, *60 to 89 college credit hours completed* = 48, *90 or more college credit hours completed* = 78, *College graduate / Baccalaureate degree completed* = 33, *Graduate student* = 67, Did not respond = 3

Question 6 - Were there any campus services not listed in the survey that you found important during your first year of college coursework during or following military service? If so, please write the service(s) in the space provided.

Responses. (n=285), Fifty-four (54) participants provided written responses. Thirty-four responses (82 percent) confirmed the selection of the 22 campus services selected for the survey.

Ten of the 54 responses (18 percent) suggested additional services for student veterans; none of the ten responses were listed twice.

Question 7 - What military branch have you served in? (Multiple responses authorized)

Responses. (n=282), *U.S. Coast Guard* = 2, *U.S. Air Force* = 68, *U.S. Army* = 124, *U.S. Marine Corps* = 41, *U.S. Navy* = 33, *More than one branch* = 14

Question 8 - What is the highest military rank you attained?

Responses. (n=282), *Enlisted, E1 to E4* = 93, *Non-commissioned officer, E5 to E6* = 135, *Senior non-commissioned officer, E7 to E9* = 38, *Commissioned officer, O1 to O3* = 10, *Field grade officer, O4 to O6* = 6

Question 9 - Did your military service include any combat tours?

Responses. (n=282), *Yes* = 168, *No* = 114

Question 10 - Did you attend college prior to your military service?

Responses. (n=282), *Yes* = 140, *No* = 141, *Did not respond* = 1

Question 11 - How many years after your military service, did you begin your college coursework?

Responses. (n=282), *0 years* = 96, *< 1 years* = 61, *1 year* = 19, *2-4 years* = 48, *5-10 years* = 34, *10 or more years* = 22, *Did not respond* = 2

Question 12 - What is your age?

Responses. (n=282), *18-19 years old* = 1, *20-29 years old* = 70, *30-39 years old* = 113, *40-49 years old* = 54, *50-59 years old* = 37, *60 years old or more* = 7

Question 13 - What is your sex?

Responses. (n=282), *Female* = 83, *Male* = 198, *Did not respond* = 1

Question 14 - What is your preferred mode of taking college courses? (Multiple responses authorized).

Responses. (n=282), *In-person classes* = 109, *Online classes* = 38, *Blended classes: a mix of in-person and online* = 118, *Competency-based classes, in-person or online* = 17

Question 15 - Are you a first-generation college student?

Responses. (n=282), *Yes* = 156, *No* = 126

Question 16 - How would you classify the campus where you are currently taking classes?

Responses. (n=282), *Private, college or university* = 62, *Public, 2-year degrees (e.g. community college)* = 29, *Public, 4-year degrees (e.g. regional or research university)* = 186, *Unknown* = 5

Survey Analysis. Based on findings from previous studies, nearly all of the responses (88%) to this survey show a sample that is representative of the student veteran population. This is highly suggestive of an appropriate data collection. While the study should be replicated to determine if the instrument is reliable, the campus service ratings are likely valid.

For additional information about the survey's results or the study's findings, please contact the primary researcher, Ray Dillman at ray.dillman@okstate.edu.

APPENDIX H: Observed Frequencies

Order within the Importance Score rating question - Campus Service	Proportion for Extremely important option	Proportion for Important option	Proportion for Slightly important option	Proportion for Not important option
1 - Admissions / Enrollment assistance	63	31	4	2
2 - Academic credit for military service	53	24	14	9
3 - Academic advising	54	34	9	3
4 - Academic tutoring / support	37	30	25	8
5 - Study skills workshops / assistance	31	29	30	10
6 - Clear academic policies and practices	44	36	15	5
7 - Veterans-only orientation / classroom	28	22	25	25
8 - Student veterans' peer-to-peer mentoring	29	26	30	15
9 - Faculty who understand military veterans	52	27	14	7
10 - Staff who understand military veterans	54	28	11	7
11 - Advisors / mentors who are military veterans	38	27	21	14
12 - An office designated to support veterans	61	28	9	2
13 - Student veterans organization / club	30	32	24	14
14 - Dedicated social space for student veterans	25	25	25	25
15 - Assistance with VA educational benefits	80	17	2	1
16 - Assistance with non-educational VA benefits	58	28	11	3
17 - Assistance with financial aid benefits	64	26	8	2
18 - Employment assistance	45	34	17	4
19 - Career planning assistance	45	38	15	2
20 - Internet / computer assistance	34	30	23	13
21 - Counseling services for veterans' issues	49	34	12	5
22 - Medical services for veterans' issues	47	29	14	10
Average	46.41	28.86	16.27	8.45

VITA

Raymond E. Dillman III

Candidate for the Degree of

Doctor of Philosophy

Dissertation: SUPPORTING THE ACADEMIC SUCCESS OF FIRST-YEAR
STUDENT VETERANS

Major Field: Educational Leadership and Policy Studies

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Educational Leadership and Policy Studies at Oklahoma State University, Stillwater, Oklahoma in May, 2022.

Completed the requirements for the Master of Arts in English at Auburn University, Auburn, Alabama in 2007.

Completed the requirements for the Bachelor of Arts in Letters at the University of Oklahoma, Norman, Oklahoma in 1997.

Experience:

2007-2010, Assistant Professor of English, United States Military Academy at West Point, NY.

2013-2022, Director of Institutional Effectiveness with other faculty and staff positions at Mid-America Christian University, OKC, OK.

Professional Memberships:

Association for Institutional Research (AIR)

Council for Adult and Experiential Learning (CAEL)