Acculturation and Career Development Needs of Undergraduate Military Veterans

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Acculturation and Career Development Needs of Undergraduate Military Veterans

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Abstract

Empirical research addressing factors impacting veterans' postsecondary completion is limited. This study examines the impact of civilian acculturation stress, college belongingness, vocational identity, and practical education satisfaction on the college commitment of undergraduate military veterans. Foundational theories, the Student Integration Model (Tinto, 1987) and the Student Attrition Model (Bean, 1982), find institutional commitment to be a significant college persistence factor. More committed undergraduates obtain higher grade point averages and are more likely to graduate than less committed undergraduates (Robbins et al., 2004; Woosley & Miller, 2009). This quantitative dissertation, mindful of these foundational theories, explored two plausible hypotheses: 1.) Undergraduate veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college. 2.) Undergraduate veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear. Undergraduate military veterans (N=170), enrolled at higher education institutions across the United States, completed a 75-item quantitative survey. The results confirm a majority of undergraduate veterans experience acculturation stress, and acculturation stress negatively impacts their sense of belonging in college (R= -.438). Both Practical Education Satisfaction (R= .643) and Vocational Identity (R= .322) are significant factors impacting undergraduate veterans' college commitment. Finally, veterans enrolled at 4-year institutions express more positive experiences than veterans enrolled at 2-year institutions across all factors within this study.

Keywords: acculturation stress, V2CASI, student veterans, veterans, college commitment, practical education satisfaction, vocational identity, college belongingness

Dedication

The efforts and energy invested in this research are dedicated to the men and women who elect to serve in the military. Specifically, I dedicate this research to Nate Hunt, Timothy Smith, Joseph Richard III, John Shepherd, Keith James, Michael Reisinger, and Robert Roulx. These are among the many who sacrificed life and/or limb in the line of duty. Their sacrifices are known by few, but forgotten by none. The difficulty and sacrifices I've experienced during my journey through academic pursuit pales in comparison to the depth and duration of their sacrifices, and the sacrifices of countless others. Until Valhalla.

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Chapter 1: Introduction

Context

There are many pressing challenges facing the field of higher education. Within the sea of challenges, analyzing undergraduate veterans' success is often overlooked due to their small representation, non-traditional status, and culture of self-reliance. Regardless of the size of this population, ethical leaders in higher education should be aware of the historical challenges and struggles faced by undergraduate veterans and look toward potential modern solutions to address these challenges. Research indicates that cultural reentry can pose a more challenging experience than experiencing a new culture for the first time (culture shock) (Austin, 1983, 1986), yet undergraduate veterans cultural reentry is not well studied or understood at this point.

Undergraduate veterans, sometimes considered "at-risk students" based on the number of known factors that are generally common for their population: low-income, first-generation, and academically underprepared (in need of academic remediation), and non-traditional aged. Currently, longitudinal data sets typically used by educational researchers and policy-makers contain meager data on student veterans (IPEDS Technical Review Panel #36 Collecting Data on Veterans, 2012, p.3). The present lack of quantitative data significantly limits statistical analysis beyond enrollment demographics. The Veterans Benefits Administration (VBA) reports enrollment statistics based on usage of educational benefits (G.I. Bill). The VBA does not track student success metrics, nor does it provide national/regional benchmarks. In addition, neither the Departments of Education (ED) nor Department of Defense (DOD) are currently reporting out student success data on veterans (Rorison & Voight, 2016). The lack of published, aggregated outcome measures screams for an increase in transparency and accountability. The

lack of public data could be due to disconnects between federal organizations and agencies. The impact is felt by veterans trying to catch up with their peers in hopes of getting back to “normal life.”

One of the most urgent goals for anyone transitioning out of the military is finding civilian employment. The urgent goal for civilian employment is not easy or straightforward for someone coming from a different society, in this case military service. The foundational difference between getting a job in the military and in the civilian world provides the context for the important role of higher education.

Those who enlist in the military are “offered a job” based on preliminary aptitude test scores on The Armed Forces Qualification Test (AFQT). The AFQT contains the same domains as SAT/ACT tests. Military recruits' main qualification for enlistment is their cognitive ability to meet or exceed cut-off scores. Qualifying scores dictate the level of job opportunities offered to recruits. Generally speaking, higher scoring individuals are offered more intellectually demanding jobs (STEM occupations/career clusters), and lower scoring individuals are offered more physically demanding jobs. Job offers are provided upon qualification, and extensive training is provided afterwards. There is no involvement of resumes, cover letters, or panel interviews.

Getting a job in the civilian world requires additional qualifications beyond cognitive ability, such as a college degree, prior work experience, professional references, and work samples. Veterans experience difficulty obtaining suitable jobs after military enlistment in large part due to lack of a college degree (Kleykamp, 2012; Knight 2014). Veterans transition with significant life experience and skills, but not those traditionally recognized as credible or

important within the civilian world. Military training, badges, awards, and medals are largely unfamiliar to the civilian world, higher education institutions, as well as the everyday workforce.

Each veteran may have unique reasons for leaving military service and unique goals in transitioning back to civilian society, college attendance and attainment is an early and important milestone during the transition phase. College attainment offers increased access to job opportunities, thus for the purposes of this study, college success is defined as completing a postsecondary degree, a two-year degree in three years, or a four-year degree in six years which are national measures governed by IPEDS (See Definition of Terms, Normal Time). Efforts to increase the college success of undergraduate veterans should focus on understanding the factors that contribute to their lack of success. Smith, the author, reviewed student success literature on veteran and other undergraduate populations. This dissertation synthesizes contemporary research on the themes of: (a) factors contributing to career maturity for college students; (b) impacts of acculturative stress on college success; and (c) connections between educational satisfaction and academic success.

Background

A global economic structural shift within the world of work, has brought into debate the purpose of U.S. higher education. The American higher education system has a 200-year tradition of liberal arts structured education, preparing individuals to be well-rounded, productive members of society. Thus higher education has been reluctant to wear the mantle of vocational development and training (Tran & Nyland, 2013). High unemployment and underemployment data of college graduates has intensified the focus on career development decision-making within higher education (Paulsen & Smart, 2013). Recently, research has found that career

decision-making difficulty is a barrier to successful student outcomes, but interventions have the potential to address career decision-making difficulties (Gibbons & Borders, 2010; Greenbank & Hepworth, 2008; Hughes, Gibbons & Mynatt, 2013).

A historical perspective of veterans in higher education provides a rich understanding of the issues faced by current undergraduate veterans. The problems faced by veterans are rooted in both civilian culture and sentiments towards the military, as well as military culture. Current literature addressing veterans in higher education references the need for renewed structures and supports that were once available to veterans in the 1940s (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, et al., 2013; McBain, L., 2008; McCready, B., & University of Wisconsin-Madison, 2010; Ness & Vroman, 2014). A historical lens is necessary to better understand the varying levels of educational support that have been available to veterans of combat since the Civil War. A modern lens is necessary to better understand the current landscape of issues faced by student veterans, which may provide the reader with a deeper, more full understanding of this population.

Morrill Land-Grant College Act

The Morrill Land-Grant College Act of 1862, also known as the First Morrill Act, was proposed and passed to promote liberal arts and practical education within each of the respective states (or territories, at the time) through the establishment and funding of educational institutions (Abrams, 1989). Legislation required the development of agriculture and mechanical arts colleges or curriculum (think A&M universities), as well as military tactics training:

> Without excluding other scientific and classical studies and including military tactic, to teach such branches of learning as are related to agriculture and the mechanic arts, in

> such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life. (7 U.S. Code § 304).

The requirement of a military training curriculum within all land-grant colleges and universities led to the establishment of Reserve Officers' Training Corps (ROTC). ROTC is an educational program for Army, Navy, Marine, and Air Force officers that is currently active (Abrams, 1989).

The Servicemen's Readjustment Act of 1944

The Servicemen's Readjustment Act (SRA) of 1944 is often referred to as the "Original G.I. Bill." This G.I. Bill provided educational and vocational training support to WWII veterans through subsidized tuition/fees and provision of living expenses. While provision of federal benefits for war veterans was not a new concept, it was the first time higher education incentives were included as part of the benefits for going to war (Olson, 1974). Contextually, one of the reasons for the development of more robust benefits was the public criticism of the treatment of WWI veterans (Weber, 2011).

Over 2 million veterans, one-eighth of all returning WWII veterans, used the G.I. Bill to attend college (Olson, 1974). It is credited with creating post-war prosperity, expanding the middle class, and providing a blueprint for future access and affordability legislation.

The impact of the SRA of 1944 lives on through developed structures such as standardized testing, federal financial aid programs, college access for non-traditional students, and expanded operations (EPC, 1946; Stanley, 2001).

The Servicemen's Readjustment Act of 1952

The updated readjustment act, also known as the Korean War G.I. Bill, maintained the same purpose as the original: "providing vocational readjustment and restoring lost educational opportunities to those service men and women whose educational or vocational ambitions have been interrupted or impeded by reason of active service in the Armed Forces" (Public Law 550, 1952). The Korean War G.I. Bill was passed due to the changing economic conditions within the U.S. and changing sentiments towards veterans (Olson, 1974).

America was experiencing an age of prosperity, which quelled the fear of a post-war recession, and quieted social unrest/protests by veterans' groups (Olson, 1974; Serow, 2004). The Teague Committee posed that the original G.I. Bill was too generous; many veterans were attending college for the living expense payments rather than educational pursuit (Olson, 1974).

The Veterans' Readjustment Benefits Act of 1966

The Veterans' Readjustment Act, also known as the Vietnam G.I. Bill, re-enacted benefits that had been unavailable between 1955 to 1965. The proposed legislation retroactively awarded benefits to veterans who had previously not been eligible during peacetime service. This iteration of the G.I. Bill also reflects societal sentiments and events. In the midst of the civil rights movement, civilian education benefits programs rapidly expanded. The emphasis on developing civilian programs caused a de-emphasis on benefits for Vietnam veterans (Cohen et al., 1995; Olson, 1974).

By comparison, Vietnam veterans obtained more education than WWII or Korean veterans, but simultaneously held the widest gap in educational attainment between veterans and

non-veterans (Cohen et al., 1995; Olson, 1974). The gap in educational attainment also produced a gap in employment and earnings between veterans and non-veterans.

Veterans Educational Assistance Program of 1977/Montgomery G.I. Bill of 1984

The Vietnam G.I. Bill was replaced in 1977 by the Veterans Educational Assistance Program (VEAP). Trends in reduction of educational benefits for veterans continued. These benefits were the first to come with qualification standards (a high school diploma and an adequate score on an aptitude test). These standards limited access to higher education for veterans with the highest need to attend (Cohen et al., 1995).

In 1985, Mississippi Congressman Gillispie Montgomery proposed modification to VEAP. This proposal would expand educational benefits to nearly all active-duty service members, regardless of whether they had a high school diploma or scored adequately on an aptitude test.

The Post-9/11 Veterans Educational Assistance Act of 2008

The Post-9/11 Veterans Educational Assistance Act, or Post-9/11 G.I. Bill, expanded educational benefits to levels similar to the original G.I. Bill. Veterans once again received a stipend for living expenses and books while also having their tuition and fees paid. The creation of this G.I. Bill also reflected society's sentiments towards veterans, particularly those who had fought in Iraq and Afghanistan (McBain et al., 2012). The relative educational attainment and employment/earnings between veterans and non-veterans is yet to be seen. As time passes, there will be more data available for comparison.

Connecting Past and Present

Since the passing of the Servicemen's Readjustment Act (SRA) in 1944 (G.I. Bill), higher education has played an important role in transitioning veterans' reintegration process back into civilian life. The importance of higher education is tied to the high percentage of veterans who chose to attend college as part of their transition process. As current veterans transition from military service, they often seek additional education and training to qualify for civilian employment. The Post-9/11 G.I. Bill of 2008 attaches significant monetary incentives to encourage recently discharged veterans to attend postsecondary education. In addition to provision of tuition and fee payment, the Post-9/11 G.I. Bill also provides a monthly stipend to assist with additional expenses (rent/mortgage, family support, etc). This dynamic positions higher education as the nerve center for successful reintegration into civilian life for veterans through education, training, and selection of a civilian career path.

A number of federal (V.A.) education and career support programs can trace their roots back to the SRA: V.A. Vocational Rehabilitation and Employment counseling (V.A.VR&E), Transition Assistance Program (TAPS), Entrepreneurship Training, and Small Business development coaching (SBA) (Ford, 2009). These programs were developed because significant needs for veterans were identified in the areas of education and employment, as well as other needs. In general, these programs exist outside the walls of higher education. There is little institutional awareness of these programs, which limits the opportunity for integration or incorporation of similar practices for student veterans or other sub-populations with similar needs.

Combat Injuries and Higher Education

Established research has shown that mental health burdens are associated with lower academic achievement and greater risk of college non-completion (Hunt, Eisenberg, & Kilbourne, 2010; Kessler, Foster, Saunders, & Stang, 1995). The focus of this study is not to explore the impact of combat injuries on college success, yet it is important to acknowledge and recognize that combat injuries are a factor in veterans' academic journeys. There are many potential injuries that pose a risk to service members while deployed in combat zones. The intention of the next section is to provide an overview summary of categories of injuries that are applicable to recognize as factors in veterans' success in higher education: Physical Injury, Mental/Cognitive Injury, and Moral/Spiritual Injury.

Physical Injury

Unfortunately, it is all too common for combat veterans to incur physical injuries while deployed in war zones. Physical injuries can range from temporary, non-severe (broken bone) to permanent, severe injuries (amputation, loss of sense(s)). It is known that veterans with disabilities are less likely to be employed than veterans without disabilities, and much less likely to be employed than non-veterans. Nearly 30 percent of veterans with lasting injuries are currently employed full-time, which is 10 percent lower than veterans who were not seriously injured during military service (Morin, 2011; O'Reilly, 2014). Of the disabled veterans who are not employed, nearly half reported that their disability kept them from gaining employment (46 percent) (Morin, 2011; O'Reilly, 2014).

It is also known that modern medical advances have increased the survival rate of veterans who are injured in combat. According to the DOD, those who fought in Iraq and

Afghanistan survived 88 percent of all combat injuries, which is significantly higher than previous wars (72 percent in Vietnam and 63 percent in World War II). The ultimate consequence of a higher success rate (saving more lives) is a significant increase in veterans living with severe disabilities.

Disabled veterans report that their disabilities take a physical, emotional, and economic toll on their lives. For example, disabled veterans are less likely to be self-employed than non-disabled veterans (6 percent to 12 percent respectively) (Morin, 2011). Disabled veterans report that their disability can make it more difficult to gain or keep a job. As might be assumed, veterans with greater disabilities experience more obstacles in the workplace. Two-thirds of those with significant disabilities report that their disability has prevented them from getting a job, while one-sixth of those with minor disabilities report that it negatively impacted employment. Veterans with disabilities also tend to seek public sector employment, due to public sector-specific incentives for hiring veterans with disabilities; 35 percent of employed disabled veterans work in the public sector, compared to 21 percent of non-disabled veterans (Morin, 2011).

Mental/Cognitive Injury

The transition experience of combat veterans back into society is complex, and not fully understood at this time. It is understood that the following factors likely impact their transition in some capacity: competing demands for their time, perceived social distance, lack of sense of purpose, and mental health burdens (including re-experiencing trauma). Established research indicates that mental health burdens are associated with lower academic achievement and greater risk of college non-completion (Hunt, Eisenberg, & Kilbourne, 2010; Kessler, Foster, Saunders,

& Stang, 1995). This research has identified impairments to attention, learning, memory, and executive functioning in combat veterans (Gil et al., 1990; Sutker et al., 1991; Uddo et al., 1993; Bremner et al., 1993, 1995; Beckham et al., 1998; Vasterling et al., 1998, 2002), as well as women with post-rape PTSD (Yehuda et al., 1995; Jenkins et al., 2000). Mental health burdens, specifically Traumatic Brain Injuries (TBIs) and Post-Traumatic Stress Disorder (PTSD), are disproportionately experienced by combat veterans due to the trauma of war.

Many of the intense and disorienting feelings associated with psychological trauma are experienced immediately following the incident. However, individuals can experience long-lasting psychological effects, including depression, anxiety, and PTSD (American Psychiatric Association, 2013; Foa, Hembree, & Rothbaum, 2007). Veterans with mental health burdens may experience intrusive symptoms, and may intentionally and persistently avoid triggering events. These individuals may suffer from autonomic hyper-arousal response to current stimuli unrelated to combat experiences, such as feelings of isolation and re-experiencing trauma in non-traumatic environments. Traumatic exposure increases the likelihood of developing symptoms that interfere with day-to-day life (Foa et al., 2007).

Combat veterans often feel “behind” their peers; they are in a hurry to catch up with significant civilian adult benchmarks such as marriage, parenthood, employment/education, and home-ownership. Competing demands on their time can lead to increased internal feelings of pressure and stress, as well as decreased focus when making significant decisions. Combat veterans often express a loss of sense of purpose, describing new roles in civilian society as less meaningful than military service. Their sentiments may include statements like, being a student

makes me feel like I'm not providing for my family and it makes me feel like I'm just a drain on society.

Some combat veterans describe the feeling of being in a crowd as distressing, negatively framing not only their college campus experience, but also navigating daily life. For these veterans, situations that remind them of combat produce anxiety, and result in hypervigilance and increased levels of distress. In some cases, on-campus events trigger disturbing memories for combat veterans, which reinforces the psychological distance between themselves and their peers. Intrusive thoughts not only negatively impact social relationships, but also negatively affect veterans' overall health, including their ability to focus and concentrate on classroom materials.

Individuals with TBIs report cognitive impairments in the areas of memory, attention, and executive function (Kennedy & Krause, 2011). It is common for these injuries to go unnoticed due to the "invisible" nature of the injury. Thus, the cognitive deficits faced by students with TBIs may affect both their academic performance and social participation. Krause and Richards (2014) found that approximately 28 percent of undergraduate veterans reported at least one possible brain injury event, and 19 percent of these reported a loss of consciousness.

Traumatic Brain Injury (TBI) has gained recognition among the general public because of two phenomena: the large number of military personnel returning from conflict with blast injuries or other forms of TBI, and the growing number of professional athletes who have reported histories of multiple concussions (Warden, 2006; Zoroya, 2005), resulting in persistent cognitive and physical deficits. Awareness of the potential negative ramifications associated with

mild TBIs (mTBIs) may be of particular interest to postsecondary institutions as they experience increasing enrollments of students with this diagnosis.

Few colleges employ (or have the capacity to employ) staff and faculty experienced in providing services to individuals with mTBIs, which may place undue burden on students who have suffered mTBIs. A 2008 survey found that 45 percent of students with mTBIs were unfamiliar with or had never used student disability services, and of those who were familiar (55 percent), only half used disability services often or regularly (Kennedy et al., 2008, p. 517).

Moral/Spiritual Injury

Litz et al. (2009) defined moral injury as the "lasting psychological, spiritual, behavioral, and social impact" of exposure to acts that transgress deeply held moral beliefs and expectations. More generally, this is a term used to represent potential negative outcomes following the transgression of deeply held moral values and beliefs. The Moral Injury Questionnaire (MIQ-M) is a 20-item self-report measure for assessing moral injury experiences. MIQ-M scores are also uniquely linked with suicide risk, as well as other mental health disorders or difficulties.

Evidence of how moral injuries impact veterans in higher education settings is currently unknown. It is possible that moral injuries could prevent undergraduate veterans from successfully completing degree programs. For example, those who have suffered a moral injury are prone to hide, submit, or repress their beliefs in order to reduce conflict. In certain higher education settings, critical thinking as well as discussions on different positions is common and considered beneficial. Those with moral injury may have a difficult time engaging in environments that encourage conflict.

Indications of possible moral injury include: inappropriate feelings of guilt or shame; social or relational issues (avoiding intimacy, anger and aggression, reduced trust in other people); spiritual/existential problems (including loss of spirituality or weakened religious faith, negative attributions toward God or higher power, or lack of forgiveness); substance abuse and other attempts at self-handicapping (suicidal ideation or other self-harm behaviors) (Drescher et al., 2011; Litz et al., 2009; Tangney et al., 2007; Vargas et al., 2013). Currently, it is not known how moral injuries impact undergraduate veterans engagement with peers, faculty, or administrators. It is known that morally injured veterans feeling shame tend to become preoccupied with their own distress and emotional discomfort (Joireman, 2004).

Moral emotions can fall on either side of the emotion continuum, positive or negative. Negatively valenced emotions commonly include guilt, shame, anger, disgust, and contempt, whereas positive moral emotions include feelings of compassion, gratitude, and pride. Moral emotions are experienced in the context of social connection (Rime, 2009). Guilt and shame notify individuals of personal moral infractions and provoke action tendencies aimed at reducing conflict or social damage. Hiding, submission, and repression are all examples of actions taken to reduce conflict. Meta-analysis has found that generalized, context-insensitive guilt is associated with depression (Kim, Thibodeau, & Jorgensen, 2011), and is especially significant for combat-related guilt.

Shame has been consistently associated with a wide variety of psychological symptoms across populations and measurement methods. While guilt focuses outwardly on specific behavior, shame involves a negative global evaluation of the core self that is accompanied by feelings of worthlessness, powerlessness, and vulnerability (Lewis, 1971; Tangney et al., 2007).

Guilt can promote greater empathy and socially reparative actions; shame typically activates social hiding behaviors and decreases empathy due to increased preoccupation with one's own distress and emotional discomfort (Joireman, 2004). Additionally, there are strong connections between shame and substance abuse, anger, and aggression. It is important to recognize that studies specifically focused on guilt and shame in former prisoners of war found that PTSD was associated with shame-proneness, but not guilt-proneness (Tangney et al., 2007). When removing the effects of shame, guilt was inversely correlated with PTSD symptoms (Joireman, 2004).

Recent research has implicated the role of combat-related trauma in the development of anger in service members. Meta-analyses have found a large effect size of anger in predicting PTSD symptomology (Orth & Wieland, 2006), which exceeds the effect size of other anxiety-related disorders (Olatunji, Ciesielski, & Tolin, 2010), and is especially pronounced in military trauma. Koffel et al. (2012) found that anger increased significantly from pre- to post-deployment, suggesting the importance of war-stressors in rates of post-deployment anger and aggression.

When controlling for combat exposure, killing in war emerges as a significant predictor of post-deployment anger (Maguen et al., 2010). These findings suggest that taking human life or engaging in other potentially morally injurious stressors may produce anger independent from the hyperarousal accompanying exposure. Worthen and Ahern (2014) identified three primary causes of anger: lack of post-deployment structure, PTSD, and morally injurious experiences (i.e., violation of conscience and betrayal of trust). Anger over lack of structure is a temporary

cause, which typically subsides in less than one year. Anger over PTSD and moral injuries can persist for years after returning from deployment.

Service members' combat experiences present unique implications for moral emotions due to stark environmental and cultural contrasts that confront these service members when they transition between military and non-military social contexts (Drescher et al., 2011; Liz et al., 2009; Vargas et al., 2013). For example, combat veterans with PTSD are found to have higher disgust sensitivity than those without PTSD (Olatunji et al., 2014), which can intensify moral emotions and judgments. These contrasts are critical in understanding moral injuries - viewing associated emotions not only as reactions to the violation of moral rules, but also as a result of shifting between two very different moral contexts.

Problem Statement

There are many unknowns about the experiences undergraduate veterans have as they enter the halls of higher education, though military veterans often re-enter civilian society through these doors. The transition from military service to a civilian society is complex and includes a number of interrelated individual and societal factors such as self-identity, vocational identity, stereotyping, and loss of social status. It is unknown which of these factors impact veterans' higher education experiences.

The purpose of this study is to better understand factors that impact veterans' commitment to college. There is little known about veterans' academic pursuit, which is an essential part of a larger discussion about their collective journey of reintegration into a wholly different society. This larger discussion includes the dissonance experienced by veterans as they

transition from the structure, environment, and culture of their respective military branch to the structure, environment, and culture of civilian society.

One of the goals of this research is to better identify what role(s) higher education plays in veterans' transition and what higher education can do to improve how they carry out their role(s). Transitioning veterans voice difficulty in relationships (social engagement) and self-perceived change in their value (self-identity). Recent literature has reopened discussions of this dissonance as a potential explanation as to why many veterans struggle when returning to civilian life (Shay, Cleland, & McCain, 2003; Sontag & Alvarez, 2008).

Research on common struggles of transitioning veterans is rich, and growing, with research findings that have produced reintegration initiatives, mental health programs, medical practices, and more. At the same time, research has little to say about the struggles faced by veterans in college, specifically veterans enrolled in undergraduate degree programs. This is problematic because over 3 million service members have transitioned back to society, and a vast majority attempt undergraduate degree programs upon return (Massachusetts Department of Higher Education, 2015).

Research has shown that first-generation college students (FGCS) are less academically prepared for college, have more difficulty acclimating to the college environment, and have a higher risk of not completing a degree program (Choy, 2001). Over 60 percent of transitioning veterans come from first-generation backgrounds (Fargo et al., 2012). Due to their FGCS background and time spent away from structured education settings, veterans are unfamiliar with higher education structures, and the supports available. Currently, student veteran research has yet to explore the identity of first-generation college student status on student veterans outcomes.

As a precursor to this study, a pilot study (Smith, 2015) indicated that transitioning veterans have difficulty successfully completing undergraduate degree programs (See Table 3). The pilot study, performed in Massachusetts, found that undergraduate veterans are performing at lower levels than non-veteran undergraduates (Massachusetts Department of Higher Education [MDHE], 2014). This study emphasized cohort comparison (first-time students) rather than age group to allow for an apples-to-apples, longitudinal comparison across their academic journeys. A few statistical comparisons provide evidence: (1) In 2013, fall-to-fall persistence rates for first time undergraduate veterans are 52 percent, whereas non-veteran undergraduate students are 72 percent (MDHE, 2014). (2) In 2013, 64 percent of undergraduate veterans in Massachusetts chose to attend community college, a significantly higher number than the 46 percent of non-veteran undergraduates (MDHE, 2014). (3) Over a three-year period, 60 percent of veterans who earn associate's degrees do so within either liberal studies or law enforcement/protective services/firefighting degree programs, which is significantly higher than the percentage of non-veterans who select these programs (MDHE, 2014). This may be an indication of veterans' lack of career clarity (or foreclosure?); additional research is required to better identify why persistence gaps between undergraduate veterans and other undergraduates exist.

In higher education, the field of Institutional Research is focused on developing institutional-level indicators associated with student success. Indicators tend to be aligned with the Association of Institutional Research (AIR), a national association providing guiding principles and best practices. Common indicators of student success include cohort persistence and completion rates. This type of analysis is known as basic descriptive: a foundational building block required for more advanced statistical analysis (Avella et al., 2016). Basic descriptive

analysis of undergraduate veterans' indicators of success is a foundational building block that should be addressed on a national level in order to allow researchers the ability to further investigate factors impacting these indicators of success.

Public Policy and G.I. Bill Benefits

The Post-9/11 G.I. Bill, passed into law June 30, 2008, has experienced a number of public policy adjustments in an attempt to make it more equitable and accessible for beneficiaries and their families. Over the past decade, it seems clear that the lack of oversight and accountability measures has allowed bad actors to take advantage of student veterans.

Since 2009, over $20 billion taxpayer dollars have been invested in transitioning veterans' education (V.A., n.d.). Some legislative changes, such as Public Law 110-252, were intended to reduce predatory recruitment of veterans by low-performing institutions, thus improving veterans' success in postsecondary programs (see Definition of Terms) (Military Times, 2020; V.A., n.d.). For-profit colleges and universities have a long history of low retention and graduation rates and well documented history of taking advantage of veterans with educational benefits. For example, University of Phoenix, the largest recipient of G.I. Bill benefits, collected over $1 billion of G.I. Bill benefits over a five-year period, while producing an 11-percent six-year graduation rate (Jones & Fox, 2017). A number of non-accredited programs and schools have been temporarily banned from receiving G.I. Bill funding due to inappropriate or deceptive recruiting practices. In 2019, the Federal Trade Commission (FTC) found that the University of Phoenix was running misleading marketing campaigns which specifically targeted active-duty service members, veterans, and military spouses (Washington Post, 2019). The 2019 FTC case against University of Phoenix is the largest settlement against a

for-profit institution, requiring $50 million compensation to former students and $141 million cancellation of student debt.

A number of student veteran advocacy organizations, such as Veterans Education Success (VES), are calling for additional reform to curb predation on student veterans with G.I. Bill benefits and military members with Tuition Assistance Program benefits. One reform called for is the inclusion of G.I. Bill and Tuition Assistance within the "90/10 Rule", regulations initially included in the 1992 Higher Education Act update (Higher Education Amendment of 1992, Public Law. 102-325). The 90/10 Rule places a cap on the percentage of revenue that can be earned by higher education institutions, at least 10 percent of institutional revenue must come from sources other than Title IV funds, which are Federal student financial aid programs (grants, loans, and work-study). The exclusion of G.I. Bill and Tuition Assistance from the 90/10 Rule means that institutions have two incentives to target veterans and service members. First, students with these benefits have guaranteed funding given directly to the institutions. Second, these students count towards the 10 percent of revenue not considered, "public funding".

According to the U.S. Department of Education (DOE) (U.S. Department of Education, 2014), at least 133 for-profit institutions received more than 90 percent of their revenue from taxpayer funding, if DOD and VA funds were included with Title IV funds. Some Federal and state governments, national non-profit organizations, and higher education leaders have begun to research best practices and effective models of support for transitioning veterans in higher education. These organizations are providing differing levels and types of support, such as financing, advocating for favorable national policy, and assisting schools in becoming "veteran-friendly" institutions (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel,

2012; Gati, et al., 2013; and McBain, L., 2008). This study will provide public policy recommendations, based on findings, in Chapter 5.

Role of Military Culture

Transitioning undergraduate veterans are in the midst of significant life changes that include the departure from military culture, support services, social networks, and the accompanying familiar military workforce. The military workforce contains unique job qualification standards: ASVAB test scores, organizational structures (firmly hierarchical), credentials (rank, tabs, awards, badges), professional development, and job promotion (amount of time served, points achieved through professional development, and number of people in the same job) (Bruneau, 2015). It is likely that military culture plays a role in veterans' perceptions of civilian society, in general, and specifically higher education.

Military Culture and Education

In general, military culture emphasizes the importance of training and skill development to ensure it is strong and deployment ready. Yet, emphasis and access to types of training significantly differ within subsections of the military, officers and enlisted ranks. Officers make up about 17 percent of all servicemembers, while the vast majority, 83 percent, are enlisted. Military officers, those who join the military with a postsecondary degree, are afforded access to attend graduate school while on active duty as part of their promotion process (Vance, 2015).

One of the benefits given to active duty Army officers is the opportunity for Advanced Civil Schooling (ACS). ACS provides officers with professional development in the form of attending graduate school, in person, at civilian universities. The eligibility requirements include GRE/GMAT score requirements and a graduate program applicable to their military occupation.

Officers are paid for attending ACS, including applicable housing costs to attend their university, and expected to enroll full-time. This is an example of officers benefits within the military, each branch may offer a slightly different educational program to their officers.

Officers and enlisted personnel are provided with a tuition assistance program benefit. This benefit is available to all branches of the military for service-members to attend undergraduate or graduate programs. This program contains a credit hour cap ($250) and fiscal year cap ($4,500). This benefit affords servicemembers the ability to continue their education, but on their own time. This means that officers are provided time away from their military duties to focus on successful completion graduate school programs. In contrast, enlisted service members, those who join the military without a postsecondary degree, have the option to attend college but this is something they must undertake in addition to their full-time military duties. Culturally, the difference in access to postsecondary education between military officers and enlisted may impact the perceived value of college degrees for enlisted personnel.

The Department of Defense Tuition Assistance Program usage data expresses a gap in accredited educational pursuit between enlisted and officers (Government Accountability Office, 2005). Between 2011 and 2013, only 20 percent of all active duty members took advantage of Tuition Assistance. In contrast, up to 38 percent of military officers hold advanced degrees (Emrey-Arras et al., 2014). Comparison between military officers and enlisted percentages are meant to highlight cultural diversity within the military, it is a large and complex organization with many sub-sections of culture. As a benchmark reference, 41 percent of all 18-24 year olds enroll in college (Kaiser Family Foundation, 2013; National Center for Education Statistics,

2013). Educational pursuit differences between the military enlisted and civilian populations within the same age range highlights a cultural difference between military and civilian cultures.

This education pursuit gap could be attributed to a number of factors impacting enlisted service members, such as their lack of time to complete postsecondary education, absence of mentors encouraging them to attend college, familial socio-economic status, or other additional factors. Additional research is needed to better understand factors impacting the education pursuit gap for enlisted service members and if their level of access during military service impacts their perception of higher education once they transition out of military service.

This study intends to offer a different perspective on best practices for supporting veterans in higher education through a postmodern lens, which dictates that predicting the future based upon the past is not possible (Bess & Dee, 2008). To accomplish this task, this study will review the evolution of educational benefits for military veterans, contextualize support services for veteran students during the same evolution time period, and offer evidence-based innovations to enhance outcomes for undergraduate veterans.

Instead of focusing on past success, this study hopes to encourage others to look at current, research-based practices focused on policy and practice shown to improve student outcomes. For example, career development intervention research reports positive impacts on student engagement, self-efficacy, performance expectations, and student outcomes across a variety of student demographic groups (McBain, L., 2008; McBain, Kim, Cook, & Snead, 2009; McCready, B., & University of Wisconsin-Madison, 2010; Ness & Vroman, 2014). This research focuses on student groups with similar struggles as transitioning veterans. Future research applying these types of interventions to veterans might produce positive outcomes.

Role of Higher Education

Higher education plays a significant role in the journey of veterans. A majority of undergraduate veterans enroll in higher education as first-time degree seeking students attending postsecondary education programs to ease their adjustment back to civilian society. As student veterans are pursuing their education, it is also common for them to be re-learning civilian culture and engaging with society. Higher education institutions offer fertile soil to nurture academic growth and personal identity growth and discovery.

Veterans attend higher education institutions to support their transition from the military to civilian life. Underlying motivations to attend college could stem from a number of needs: an immediate financial need to receive a monthly housing allowance while enrolled in college; a job market need to complete a postsecondary degree in order to remain competitive; a need to discover/re-discover themselves, using the time in college to understand who they are; or possibly something else.

Purpose of the Study

Previous studies have found that military veterans are less likely than non-veterans to graduate from college (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008; McBain et al., 2012); however, there is little research on specific factors that would explain why undergraduate veterans feel less committed to college.

One of the goals of this study is to better identify what role(s) administrators, faculty, staff, and policies play in the difficulty of veterans' transition. Transitioning veterans voice difficulty in relationships (social engagement) and perceived change in their value (self-identity).

The research questions framing this study design are expressed to describe the relationships of career planning, civilian acculturation, sense of belonging, and practical education satisfaction with college commitment. Study design is intended to address two competing, but not mutually exclusive hypotheses: The design is built to address two competing, but not mutually exclusive, hypotheses:

1. Transitioning veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college.
2. Transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear.

Research Questions

The primary research question for this quantitative study is:

To what extent do perceptions of civilian acculturation, vocational identity, sense of belonging, and satisfaction with practical education impact the college commitment of undergraduate veterans?

The following research questions support the development of the main research question:

1. To what extent does vocational identity impact undergraduate veterans' perception of and performance in college?
2. To what extent is college commitment of undergraduate veterans impacted by acculturation stress?
3. To what extent do undergraduate veterans’ transitions into civilian society affect their perception of the value of higher education?

4. To what extent does undergraduate veterans' vocational identity impact their satisfaction with higher education and commitment to college?

This study is not focused on discovering any distinction of experiences in higher education between veterans of different military branches. It is likely that Army veterans experience college a little differently from Marine, Navy, Air Force, or Coast Guard veterans, and the same for veterans of different genders. This study is interested in understanding overarching similarities within the population of military veterans as a whole, rather than sub-populations within the military community. Collectively, veterans represent less than two percent of all college students, thus the research is focused on unified understanding in order to sustainably support all undergraduate veterans (male/female/other) (Air Force, Army, Coast Guard, Marine, Navy, and National Guard).

The Approach

This study utilized a quantitative, 75-item question survey. The quantitative survey contained 5 scales: Veteran-to-Civilian Acculturation Stress Inventory (V2CASI), Commitment to College, Practical Education Satisfaction, Student Belongingness, and Vocational Identity Measure (VIM) (Appendix B). This survey also contained three optional open-ended questions, which were intended to provide the reader with a richer understanding of participant's experiences.

This study followed a quantitative multiple regression analysis model. Multiple regression analysis was selected because the study was interested in understanding the "best" description of relationships between variables. This type of correlational analysis is a powerful tool commonly used within higher education to measure positive and negative relationships

between variables. The survey was developed using a mixture of pre-existing scales and new scales developed and validated out of necessity. Chapter 3 contains full explanations and descriptions of methodologies used, and the implementation, interpretation, and analysis of data collected for this study.

As a precursor to this research study, two pilot studies were conducted: one qualitative, using semi-structured, one-on-one interviews, and the other quantitative, using a questionnaire that included validated and reliable scales pertaining to the research question and sub-questions (Hughes, Gibbons & Mynatt, 2013; Woodside, Gibbons, Davison, Hannon & Sweeney, 2012). Results of the pilot studies provided the researcher with confidence in relationships between the variables and merit of future research.

Study Setting

A Qualtrics questionnaire was distributed to collect anonymous responses from undergraduate veterans who met the study's criteria: (a) stated identification as a military veteran; and (b) enrolled in an undergraduate degree program (part-time to full-time). Participants were located through a formal organization focused on serving student veterans, National Association of Veteran Program Administrators (NAVPA). Participant recruitment included social media posting and email distribution through professional listservs. Currently, these targeted organizations contain about 450 member institutions (undergraduate and graduate), with an estimated 7,500 active undergraduate members. The researcher's target sample of 200 would result in a 5.76% margin for error and 90% confidence level.

Purposive sampling was used to collect participant responses through formal organizations focused on serving student veterans, though purposive sampling is primarily used

in qualitative research, purposive sampling exists on a continuum that includes qualitative, mixed-methods, and quantitative research designs (Patton, 2002; Poorman, 2002; Teddlie, 2005). Studies falling towards the center of the continuum "indicate a greater integration of research methods and sampling" (Teddlie & Yu, 2007 p. 85).

Convenience sampling was also used to collect responses from potential participants who qualify for the study. A convenience sample is a source that is readily available to the researcher, such as social media survey distribution.

Assumptions

This study is built on the assumptions that transitioning veterans' experience in higher education is unique and often misunderstood, yet contains struggles similar to other student groups such as international students, minority students, and first-generation college students. I am assuming that most administrators in higher education are unaware of military/veteran culture, because less than 2 percent of Americans have served in the military since 2001. I am also assuming that nationally, individual institutional enrollment headcounts contain a small percentage of student veterans, thus college leadership may not invest significant time and effort in addressing the complex issues facing student veterans. Finally, I assume that a majority of undergraduate veterans are attending college using V.A. educational benefits to fund their academic pursuit, which is an external pressure on their enrollment, retention, and completion. This is not an attempt to undermine or discredit the impressive life experiences of veterans. Rather, it is an attempt to emphasize the importance of veterans' reintegration into civilian society by highlighting the commonality of their experiences with other undergraduate students. Veterans transitioning from the military experience civilian life through a distinct lens.

Transitioning undergraduate veterans have historically significant experiences to share with classmates, professors, staff, and others beyond college walls. College is the ideal environment to encourage transitioning veterans to engage in self-exploration and to understand their place in the civilian world.

This study also assumes that transitioning veterans desire to reintegrate into civilian society. There are a number of national veterans organizations that provide opportunities for veterans to hang onto their military identity as their primary identity. This study assumes that, if provided the option, transitioning veterans would recognize the value of investing in developing their civilian identity, career, and values.

Significance and Rationale

Completing a postsecondary degree has nearly become a rite of passage for adulthood in the United States, and many veterans are struggling with college-level work and adult life. Economic pressures and the shifting job market contribute to veterans' need to attend college after the military: 1.) Transitioning veterans are non-traditional students with financial concerns beyond paying for education. Non-traditional student attributes include those who are financially independent from parents; are employed part or full time; and are likely to have at least one dependent (spouse, partner, or child) (Metzner & Bean, 1987; Taniguchi & Kaufman, 2005). 2.) Veterans' financial aid, the Post-9/11 G.I. Bill and other VA educational benefits are capped at 48 months of use. This time limit provides a small safety net for remedial coursework or changing degree programs. 3.) Additional education attainment does not guarantee improved access to employment opportunities. Recent research indicates that stereotyping of veterans can negatively

impact veterans' ability to work in certain occupational fields perceived as low fits by human resource managers (Shepherd et al., 2019).

The results of this study have the potential for far-reaching implications for undergraduate veterans as well as service members transitioning out of military service. Currently, college administrators and faculty members are seeking to understand how to best support transitioning veterans on their respective campuses. The feedback and participation of undergraduate veterans will enlighten those who are interested in supporting veterans' transition from military service to the civilian workforce through the conduit of higher education. Study findings can aid college administrators' understanding of the issues facing undergraduate veterans, and assist in their ability to develop programs that will effectively integrate veterans into the learning community.

In addition to this study's application on college campuses, the findings can also contribute to the support provided for service members transitioning out of the military, and meaningfully contribute to the dearth of literature about career development practices for undergraduate veterans. Those who are transitioning out of the military are encouraged to attend higher education because of military benefits structures, as well as the established cultural value of higher education. The findings of this study will be valuable for those who administer federal programs aimed at supporting military/veteran transitions, colleges, future employers, veterans' organizations, family members, and the general public.

Organization of the Dissertation

Chapter One offers an introduction to the population and background context associated with the problem statement. Chapter Two reviews pertinent literature and theoretical frameworks

supporting the developed hypotheses, that acculturation stress, vocational identity, and sense of belonging impact veterans' commitment to undergraduate programs. Chapter Three describes the methodology implemented in order to gather and analyze the relationships between acculturation stress, vocational identity, practical education satisfaction, and commitment to college. Chapter Three also describes the study's design, population and sampling recruitment, data collection and survey tool, analysis plan, and protection of human subjects. Chapter Four provides analysis results of the quantitative research study associated with the problem statement, and provides limitations of the study based on the results. Finally, Chapter Five will contain a study summary, discussion of research findings, implications, recommendations for future research, and a conclusion.

Chapter 2: Literature Review

Introduction

This chapter will examine literature pertaining to undergraduate veterans' difficulty in higher education. The specific topics that will be reviewed include career maturity, belongingness, acculturation stress, combat injuries, and military culture. The intention of this chapter is to explore each of these topics through the lens of their impact on students' experiences in higher education. The summary section will clearly report on previous research findings, gaps that validate the need to perform this study, and research strengths that should be repeated in future studies. Due to the lack of studies examining correlations among the variables of acculturation, career planning, and veterans in higher education, this review will rely on studies that have analyzed these variables in other student populations.

Literature Review Results

For this review, electronic databases (EBSCO, Lexus/Nexus, Proquest, and Sage Premier) provided research documents that include terms such as: *veterans, student veterans, undergraduate veterans, veterans transition, veterans academic outcomes, career maturity, career counseling, career planning, career indecision, career decision-making difficulties, belongingness, stereotyping, military culture, veteran culture, career decision-making self-efficacy*, *career decision-making*, *acculturation*, and *acculturative stress*.

Exclusion Criteria: Studies were excluded from this literature review based on outcomes (null hypothesis) and publication in non-English language.

Theoretical Framework

This study is derived from two theoretical frameworks to provide a description of the variety of factors influencing veterans' transitions through higher education and back into civilian society. The first framework is Liptak's (2008) career development theory, which closely follows Super's (2008) life stages (growth, exploration, establishment), and focuses on the interconnected phases of career planning and decision-making (Table 1). This framework acknowledges that career planning involves struggle, including personal assessment of areas of weakness, which is useful in improving overall career maturity (Liptak, 2008; Super, 1990).

The second framework is the process of acculturation (Figure 1) (Zhou et al., 2008). This framework gives specific consideration to the acculturation and career maturity of veterans in higher education. The reason for its selection is its recognition of the importance of development of stress-coping strategies, social skill acquisition, culturally valuable skills development, and its acknowledgment of the important role of societal-level factors.

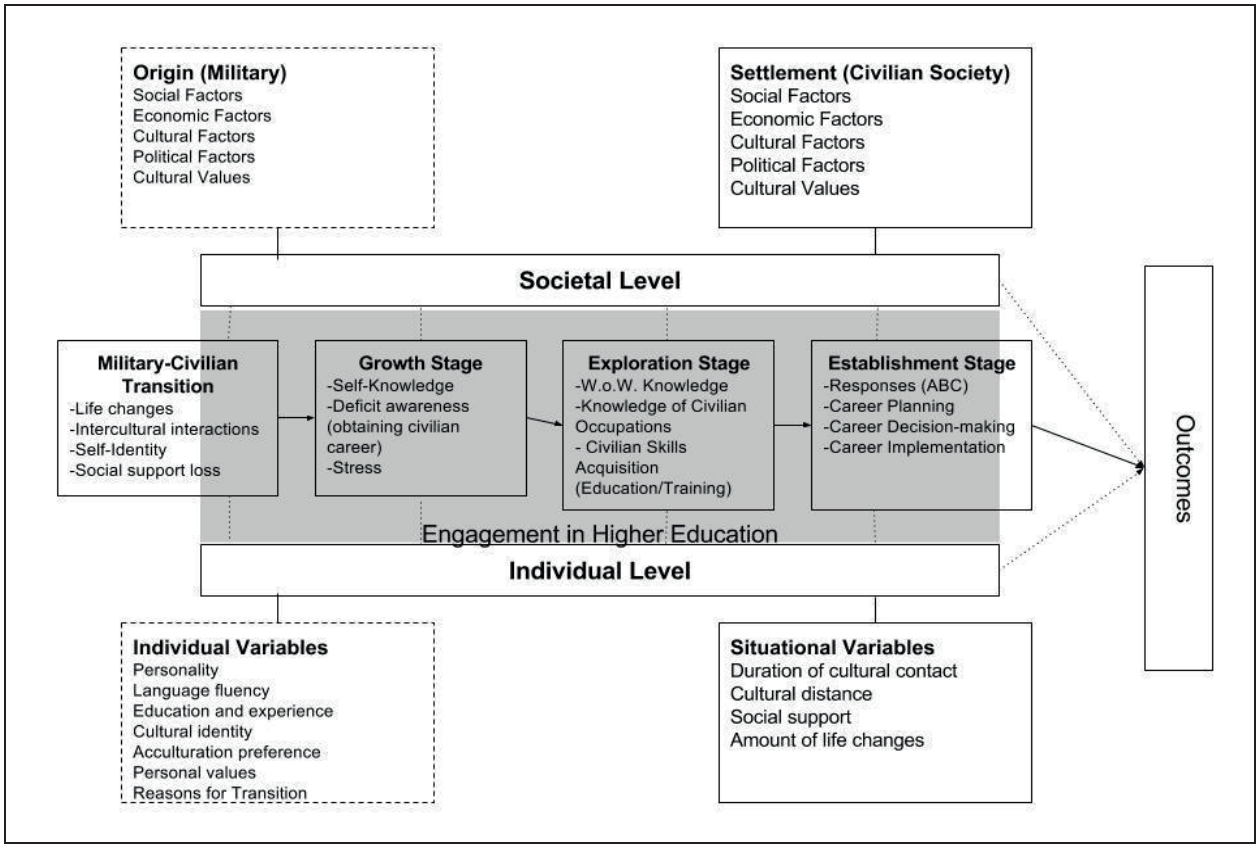
Table 1

Super's Stages and Liptak's Category Alignment

Super's Stages	Liptak's Categories
Growth	Knowledge of the World of Work
Exploration	Self-Knowledge; Knowledge of Occupations
Establishment	Career Decision Making
Maintenance	Career Planning
Disengagement	Career Implementation

Figure 1

Theoretical Framework: Acculturative Career Planning (adapted from Ward, Bochner, and Furnham, 2001).



Support Services for Undergraduate Veterans

Some transitioning undergraduate veterans express frustration with their experiences in higher education due to feeling misunderstood, disconnected from other students, and confused by higher education structure and culture; struggling with academic work; or not receiving credit for military experience (Bonar & Domenici, 2011; Church, 2009; Shackelford, 2009; Wurster et al., 2012). Administrators and researchers, mostly unfamiliar with military culture, tend to take a historical approach to address the needs of current veterans (Abrams, 1989; DiRamio & Jarvis,

2011; Hammond, 2016; Livingston et al., 2011; Robertson & Eschenauer, 2020; Toven, 1945; Vacchi & Berger, 2014), essentially dusting off support playbooks from prior influxes of military and veteran students. There are periodic scholarship dearths which align with periods of low military engagement (Vacchi & Berger, 2014), such as a 30-year period between Vietnam era veterans and Post-9/11 veterans. Periodic scholarship gaps cannot be attributed to the single factor of veteran enrollment patterns, yet it is important to acknowledge the lack of scholarship between higher enrollment periods limits scholarly inquiry's ability to offer empirically-based student support service alternatives (Vacchi & Berger, 2014).

Historical Needs and Services

Higher education and the civilian workforce have changed significantly over the past 50-years, including changes through federal policy (Higher Education Acts of 1965 and 1972) and social movements (civil and equal rights). These changes appropriately ushered in significant research focused on college experiences of underrepresented and/or marginalized populations (women, racial/ethnic minorities, non-traditional students). Unfortunately, this era of policy change did not focus on the population of military veterans. Thus veterans are transitioning into arenas of higher education and society with modern day needs, but supported by outdated practices not based on evidence (Pascarella & Terenzini, 2005). Contemporary research (e.g. Bauman, 2009; DiRamio et al., 2008; Livingston et al., 2011; Rumann and Hamrick, 2010) begins to offer new opportunities to review and revise support services for student veterans. The question remains, how long will this period of research last? Will this be another cycle of research that comes to a close as the veteran population decreases? The veteran population, 22.7 million in 2010, is estimated to shrink to 14 million by 2035 (Capozzoli, 2013).

Over time support services evolved to meet the perceived needs of veterans. The societal evolutionary process includes shifting needs of students, which requires higher education to reconsider and potentially re-prioritize services. For example, initial academic support for WWII veterans became policy and practice blueprints to increase access for other groups who were not welcome in higher education at the time (Greenberg, 1997; Shaw, 1947; Stanley, 2001). In 1944, the Servicemen's Readjustment Act (G.I. Bill of Rights) guaranteed education and training benefits to service members, becoming the first large-scale direct student financial aid initiative in the U.S. Federal financial aid programs were developed from the model of the G.I. Bill (Stanley, 2001). Large-scale financial assistance was a radical shift in the fundamental purpose and identity of higher education institutions, forcing institutions to re-conceptualize their mission and purpose.

In addition to financial assistance, standardized assessments were developed for WWII veterans, the first large-scale group of non-traditional college students. The Scholastic Aptitude Test (SAT) was developed by the Educational Testing Service (ETS) in 1948 specifically for the influx of veteran students (Lemann, 1995). Standardized assessments were developed in order to measure their intelligence and experiential knowledge, from which support services were developed to aid veterans with lower aptitude scores. Since then, standardized placement and prior learning assessments have become commonplace within higher education (Lemann, 1995). The SAT is an example of a significant and lasting impact on higher education which derived from services created specifically with the intention of supporting veterans in their return back to society at the time.

Another significant societal shift that impacted higher education services was the increased world-of-work requirement for higher education completion. In the 1970s, during Vietnam veterans' transitions back to society, over 70 percent of jobs required a high school diploma or less, and only 16 percent required a bachelor's degree or above (Carnevale et al., 2013). In contrast, by 2010 jobs requiring a bachelor's degree or above had doubled to 32 percent, representing an appreciably more education-focused job market (Carnevale et al., 2013). Presently, at least 65 percent of jobs require educational attainment beyond high school (Carnevale, et al., 2013), which includes postsecondary certificates through professional/graduate degrees. Today's transitioning veterans have an increased need to access and complete higher education programs in order to join the civilian workforce.

Historically, employment support services for veterans existed within the field of workforce development, structurally outside of higher education services (Nilsen, 2000). This may have been an effective practice for prior generations of veterans due to societal norms, such as a low percentage of jobs requiring postsecondary degrees (Duffin, 2019). It is a continuing practice due to Federal regulation (CFR), "employment services includes the counseling, medical, social, and other placement and postponement services...to assist the veteran in obtaining or maintaining suitable employment" (38 U.S.C. 3107, 3117; Nilsen, 2000). These services are legislated to be carried out by two roles, Local Veterans' Employment Representative (LVER) and Disabled Veterans' Outreach Program Specialists (DVOP), funded through Department of Labor's (DOL) Veterans' Employment and Training Service (VETS) grants which funds about 2,500 DVOP/LVER staff positions across the country (Nilsen, 2001). The Government Accountability Office's (GAO) reviews of DOL VETS (Nilsen, 2000, 2001)

include concerns about inability to determine program effectiveness, lack of goal clarity, and lack of cohesiveness within state career centers (Chrisinger, 2017; Nilsen, 2000, 2001; Provisions, Mitchell, & Officer, 2014). Currently, DVOP and LVER staff performance measures focus on the number of veterans who gain employment, by any means (Nilsen 2000, 2001). Performance measures do not take into account the quality of service provided, intended employment goals of the veteran, postsecondary program completion, nor sustainable wage employment. *This is a potential modern day structural barrier to postsecondary program completion for veterans.*

Recent studies on veterans in higher education have recommended Schlossberg's transition model, a theoretical framework offered as an updated student veteran support model during their college pursuit. (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008; McBain et al., 2009; McCready, B., & University of Wisconsin-Madison, 2010; Ness & Vroman, 2014). Studies concluded that college campuses should improve institutional interdepartmental working relationships in order to reduce barriers expressed by student veterans. It seems reasonable that improved working relationships between DVOP/LVER and postsecondary institutions would benefit student veterans. Transitioning veterans would benefit from career development practitioners, who are well versed in both veterans' culture and educational benefits as well as theories of human growth and development within higher education (including career decision making).

Modern Solution for Modern Issues

Student persistence research and practice has dramatically evolved over the past 40 years. The intention of early persistence research focused on identification of students' deficit characteristics. Common characteristics of students' who did not persist were then excluded from

being admitted to institutions. These exclusionary standards of admissions and recruitment benefited the institutions, increasing retention and graduation statistics (Astin, 1977). The focus of recent research has shifted to a better understanding of why students remained enrolled, and to proactively develop programs and services to maximize student growth, development, and success (Nutt, 2003; Salter, 2008). A major theme in recent studies is a call for the return to past eras of awareness, services, and support for veterans. (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008; McBain et al., 2009). The evidence of academic support previously needed by veterans of past conflicts (Vietnam, Korea, WWII, etc.) provides historical precedence to reinforce the theory that veterans need support to succeed in college. It is reasonable to conclude that current veterans also need such support. The next sections will outline indicators of some of the needs of current undergraduate veterans including enrollment patterns, remedial needs, program retention, and program selection.

Veterans' Outcome Measures

Statistical data indicate that undergraduate veterans are experiencing difficulty remaining enrolled in and completing postsecondary programs. Objective higher education outcome measures such as degree completion, college readiness, retention rates, graduation rates, and course completion indicate that undergraduate veterans lag behind non-veteran peers in their ability to persist and complete undergraduate degree programs (See Tables 4, 5, 6, 6.1, 6.2, 6.3) (CAEL, 2010; Kleykamp, 2013; Lemos, 2013; Smith, 2015). Undergraduate veterans attending public colleges and universities in Massachusetts are more likely to be enrolled in remedial coursework (Table 2); more likely to enroll in open-enrollment community colleges (See Table

4) (Smith, 2015); and less likely to persist from year one to year two (See Table 4) (Smith, 2015). Enrollment in remedial coursework is an early indicator associated with lack of degree completion (Bailey, 2009; Complete College America, 2012; Howell and Grodsky, 2010; Long & Boatman, 2013; Offenstein, 2010).

Student success metrics associated with community college persistence and completion rates are significantly lower than four-year colleges or universities (Hussar et al., 2020). Overall, only 33 percent of first-time, full-time undergraduates earn a 2-year degree within 150 percent of the normal time required for completion (National Center for Educational Statistics [NCES], 2019). In comparison, 62 percent of first-time, full-time undergraduates seeking a bachelor's degree complete within 150 percent of normal time (NCES, 2019).

Retention Rate Comparison

Retention and graduation rates are two measurements of student persistence and successful completion of an undergraduate degree. Second-year retention and six-year graduation rates are standard national benchmarks for measuring and comparing institutions. Higher second-year retention rates produce higher graduation rates, while lower second-year retention rates produce lower graduation rates.

Over three academic years, undergraduate veterans enrolled in public institutions persist less frequently than non-veteran undergraduates (Smith, 2015). Within the Fall 2013 cohorts, veterans were retained 20.3 percent less than non-veterans, the largest gap over the past three cohorts. The retention gap between veterans and non-veterans is the second descriptive success indicator providing evidence that veterans are having difficulty succeeding in higher education.

Six-year graduation data for veterans using the Post-9/11 G.I. Bill is just beginning to emerge. Long-term tracking of this benchmark will provide a more complete understanding of how veterans are doing in undergraduate degree programs. Currently, the amount and duration of 6-year graduation data for undergraduate veterans does not provide enough evidence about their outcomes. There are early indicators that veterans may be struggling to complete at the same rate as their peers, which will be discussed in the next section.

Retention Rate Comparison by Gender

Further analysis (Smith, 2015) is provided by disaggregating retention rates by gender, in this case the data provides male and female gender options (Table 3.1; Table 3.2). Table 3.1 (Smith, 2015) compares Fall-to-Fall retention rates of first-time degree-seeking females by veteran and non-veteran status. Two-factor analysis (Smith, 2015) indicates that female veterans are lagging behind their non-veteran peers in persisting into their 2nd year (Table 3.1). For example, there is a 14.7 percent retention gap between veteran and non-veteran females of the Fall 2013 cohort (Table 3.1). This retention rate gap offers an early indicator female veterans may have difficulty completing degree programs at the same rate as non-veteran females.

Table 3.2 (Smith, 2015) compares Fall-to-Fall retention rates of first-time degree-seeking males by veteran and non-veteran status. This two-factor analysis provides clear evidence that male veterans are lagging behind male non-veteran peers by a wide and persisting gap. The 2nd year retention gap between male veterans and non-veterans in the Fall 2013 cohort was 20.3 percent, a significantly larger retention gap than between female veterans and non-veterans (Table 3.1) (Smith, 2015). This analysis provides clear evidence that male veterans are having difficulty persisting to Year 2. It may be an early indicator that male veterans are having

difficulty completing degree programs at the same rate as their male non-veteran peers. Additional research on completion rates of veterans and non-veterans is needed to solidify if there is a significant difference in completion rates, and what factors might contribute to potential completion differences.

Enrollment Trends

Massachusetts veterans enroll at public community colleges at a very high rate: 83 percent of all enrolled undergraduate veterans attended community college in Fall 2013 (Table 4) (Smith, 2015). In comparison, 55 percent of all undergraduate non-veterans attended community college (Table 4) (Smith, 2015). Currently the enrollment gap between veterans and non-veterans is not well-known or understood. What is known is community colleges in Massachusetts are open-enrollment institutions; admission is granted to any applicant with a high school diploma or GED. Veterans' enrollment selections may be tied to high need for remediation, inability to gain acceptance at more selective institutions, unfamiliarity with higher education systems, or a combination of these and other issues.

The National Center for Education Statistics (NCES) collects and aggregates data from all postsecondary institutions participating in Title IV federal financial aid through the Integrated Postsecondary Education Data System (IPEDS). Since 1990, postsecondary institutions have been required to report the percentage of their students who complete programs within 150 percent of the normal time for completion (see Definition of Terms) (e.g. 3 years for a 2-year degree, 6 years for a 4 year degree). Completion measures collected annually allow for longitudinal analysis and comparisons between types and levels of institutions.

NCES (2018) reports the 6-year graduation rate for students seeking a bachelor's degree at 4-year institutions to be 60 percent, which includes public (60 percent), private (66 percent), and for-profit (21 percent). This means that by 2017, 60 percent of students who first enrolled in college in 2011 completed their bachelor's degree at the same institution they began. The 60 percent 6-year graduation rate in 2017 is an increase of 2 percent from the 2010 graduate rate of 58 percent at 4-year institutions (NCES, 2018).

In contrast, NCES (2018) reports that the 3-year graduation rate of students seeking a certificate or associate's degree at a 2-year institution is 32 percent, which includes public (25 percent), private (62 percent), and for-profit (61 percent) institutions (NCES, 2018). NCES also collects and tracks transfer and drop out rates of 2-year institutions due to prevalence. Of those beginning a certificate or associate's degree in 2014, 15 percent of these students transferred to another institution in 3 years or less and 41 percent were reported as not enrolled at any institution (NCES, 2018).

Undergraduate veterans disproportionately enroll in community colleges compared to their non-veteran peers. Enrollment data expresses an ongoing enrollment gap trend between veterans and non-veterans. Over a 3-year period, a vast majority of veterans in Massachusetts enrolled in community colleges, including 83 percent in Fall 2013 (Table 4) (Smith, 2015). In contrast, 55 percent of non-veteran students enrolled in community colleges in Fall 2013 (Table 4). At this time, it is not completely clear as to why veterans enroll in community college at a disproportionate rate.

NCES completion reports provide evidence that students enrolled at 2-year institutions complete at significantly lower rates than students enrolling at 4-year institutions (NCES, 2018).

The enrollment gap between veterans and non-veterans indicates that lower completion rates disproportionately negatively impacts undergraduate veterans. Additionally, it is more likely that veterans enrolled at community colleges will transfer to another institution (NCES, 2018). The enrollment gap as well as transfer and completion rate disparities between 2-year and 4-year institutions should be considered early indicators of concern for undergraduate veterans.

As veterans transition out of the military, they leave their social network and familiar culture. Enrolling at institutions with more transient student populations will likely reduce their opportunity to develop a civilian social network. A more optimal institutional setting may be 4-year institutions, which boast higher retention and completion rates (NCES, 2018). At this time, additional research is needed to better understand veterans enrollment experiences at 2-year and 4-year institutions.

Developmental Education Trends

College readiness is a rather complex and technical term (see Definition) that was developed to improve the readiness of high school students for college. One measurement of college readiness is remedial coursework enrollment, which measures students' ability to perform college-level work. Enrollment in remedial courses has a negative relationship with retention in and completion of two and four-year degree programs. Remediation increases the number of requirements necessary to complete a degree, extends the time to degree completion, and impacts degree selection (Bettinger & Long, 2009; Greene & Forster, 2003; McCabe, 2001; Soliday, 2002).

Academic underpreparedness, which is typically defined as a lack of measurable skills in reading comprehension, writing skill, and/or mathematics within standardized exams (Bailey,

Jeong, & Cho, 2010), can be a formidable barrier to degree completion for students requiring remediation, which is exemplified through a majority of academically underprepared community college students who do not complete their remedial requirements (Bailey, Jeong, & Cho, 2010; Mejia, Rodriguez, & Johnson, 2016). A majority of colleges and universities have reduced or eliminated admissions requirements, replacing them with academic requirements in the form of placement or proficiency exams (Long & Boatman, 2013). The intention of remedial/developmental coursework is to support academically underprepared students, yet remedial/developmental programs often become an access barrier to college-level courses (Complete College America, 2012; National Center for Education Statistics [NCES], 2003). Research indicates that remediation programs are not effective at improving students' outcomes (Bettinger & Long, 2009; Boatman & Long, 2010; Martorell & McFarlin, 2011) due to a variety of factors, such as additional time needed to complete a degree and additional financial burden to pay for remedial courses.

Currently, there is a noticeable gap in literature addressing developmental education, developmental reform, and student veterans. Emerging evidence indicates that veterans may be required to enroll in remediation at a significantly higher rate than their peers (Table 2). The researcher's initial comparative analysis of first-time, degree-seeking undergraduates found that nearly half of all undergraduate veterans enrolled in public colleges and universities in Massachusetts were required to take remedial coursework (Table 2) (Smith, 2015) in a given academic year. In contrast, non-veteran first-time degree-seekers were much less likely to be required to enroll in remedial coursework (Table 2) (Smith, 2015). In Fall 2014, 49 percent of first-time, degree-seeking veterans were required to take at least one remedial course; while 36

percent of all first-time, degree-seeking students were required to take at least one remedial course (Table 2) (Smith, 2015). Initial analysis indicates that the remedial gap may be a persistent gap, not a one-year outlier. While not known, it is reasonable to assume that veterans' extended gap between high school and postsecondary education has a negative impact on their academic readiness, which may be a factor in the high percentage of veterans required to enroll in remedial coursework.

An initial study (Garrity, 2017) exploring factors impacting veterans persistence and completion, found that veterans enrollment in remedial coursework reduced the probability of their persistence and graduation. At this time, it is not clear as to what additional factors may negatively impact graduation rates, possibly increased time to completion, reduced self-efficacy, reduced satisfaction, or others. Future studies on remediation are required to better understand how remediation impacts undergraduate veterans (Farrington et al., 2012).

Currently, literature has not addressed developmental reform interventions that may better address postsecondary attainment for undergraduate veterans. It is known that student veterans are transitioning from a culture that tends to stigmatize asking for help (Eagle et al., 2020; Heath et al., 2017; Vogel & Heath, 2016). Help-seeking stigma (i.e., the loss of status or discrimination one experiences by seeking or considering seeking help.) is considered an important barrier for both current and former military members (Cornish, Thys, Vogel, & Wade, 2014; Held & Owens, 2013; Kim, Thomas, Wilk, Castro, & Hoge, 2010; Skopp et al., 2012; Wade et al., 2015). It is reasonable to believe that help-seeking stigma may play a role in veterans' college and career readiness.

A practical example of military culture and support seeking behavior is the “warrior ethos.” There are variations of this ethos within each branch of the military, yet the overarching value is military doctrine. The Army Warrior Ethos, “ I will always place the mission first. I will never accept defeat. I will never quit. I will never leave a fallen comrade.” (U.S. Army, 2021, Warrior Ethos, para. 1) offers a window into military culture. This is one of many ethos that are required to be memorized by military members. A recurring theme within military culture is that of self-sufficiency, mental and physical strength, personal courage, and stoicism (Heath et al., 2017; Skopp et al., 2012).

These military cultural values, such as never accepting defeat, shape those who join the military to ensure their “combat readiness;”a term that refers to individual and collective abilities, skills, and competency associated with preparedness to go to war (Shamir et al., 2009). When considering the academic preparedness of veterans, it is important to understand some of the cultural characteristics of the military and how these may impact intellectual development.

Course Completion Trends

Course completion and postsecondary program completion are immutably intertwined. In order to successfully complete a postsecondary program, students must successfully complete postsecondary courses within respective programs along their paths. Both course completion and program completion interventions fall under the umbrella of student success interventions. There are rich and robust bodies of literature on the topic of student success (Agrawal, 2014; Engle & Tinto, 2008; Melzer & Grant, 2016; Terenzini, 1998; Tinto & Cullen, 1975; Tinto, 1993, 2012, 2017)

Tinto and Cullen's (1975) foundational theoretical framework associated with student success, Model of Institutional Departure theory, focuses on better understanding the relationship between student's social class and their likelihood of dropping out of college. From this formative study, Tinto has contributed his research career to better understanding complex factors impacting student success. There are many factors and barriers that have contributed to the lack of proactive strategies for supporting students on their journey towards success, such as which interventions are needed and when these interventions are needed (Tinto, 2012, 2017). If a great intervention is built into the wrong place in a college journey, students in need may never progress to take advantage of the services or support they need (Agrawal, 2014; Melzer & Grant, 2016). Some of the challenges associated with the development of proactive student supports include: the inability to collect data from students after attrition, the length of time within postsecondary programs tends to include significant life changes (many variables), postsecondary success builds on pre-college formal education variables, as well as family backgrounds (Terenzini, 1998; Tinto, 2012).

Two significant factors have shifted how interventions are conceptualized and provided. First, higher education has become more accessible due to public policy, the Higher Education Act of 1965, and changes in perceptions and understanding of need. Second, technology and implementation of new technology in the fourth industrial revolution has brought with it innovative research design practices to offer more accurate predictions through analysis of larger datasets.

As higher education has become more accessible for populations who were discouraged or excluded from attending, pre-college characteristics and demographic characteristics have

become critically important for student success interventions. For example, it is known that first-generation college students (see Definition of Terms) are more likely to enter postsecondary programs underprepared (Engle & Tinto, 2008; Smith, 2004). Initial student success interventions to support first-generation, low-income, minority, and other at-risk college students were generalized and tended to add more program requirements rather than consolidate them (Tinto, 2012). Modern student success strategies have become more customized and proactive (Whitman, 2020). For example, co-requisite remediation allows students to enroll in remedial education while simultaneously being enrolled in the postsecondary credit-bearing course. Co-requisite remediation is included in the 2019-2020 amendment to the Higher Education Act of 1965 (H.R. 3950).

Credit completion data collected from MDHE (Table 4) provides a three year comparison between undergraduate veterans and non-veterans at public institutions in Massachusetts. Comparative analysis indicates that: 1.) veterans enrolled in 4-year institutions complete credit-bearing courses at a higher rate than veterans in 2-year institutions. 2.) veterans complete credit-bearing courses at a lower rate than non-veterans in both 2-year and 4-year institutions. The completion gap between non-veterans and veterans exists across the three fall semesters analyzed, and slightly increases each of the three semesters. This analysis does not indicate or nor control for course-level, course subject matter, or program enrollment. The intention of this initial analysis is to provide evidence that veterans may be having more difficulty completing credit-bearing courses, which may be an early alert to difficulties completing postsecondary programs.

Literature associated with student veterans' success does offer solutions and frameworks to potentially improve services and supports for veterans enrolled in postsecondary programs (Ackerman et al., 2009; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008; McBain et al., 2012). There is a need for future research addressing course completion impact on student success outcomes, as well as early-alert modeled interventions for undergraduate veterans. Future research may uncover customized strategies that effectively close the gap in course completion as well as retention rates.

Degree Completion Comparison

This section will provide descriptive statistics providing the top three certificates and associate's degrees earned by undergraduate veterans, the share of those degrees earned, as well as the amount and share of STEM certificates and degrees earned. There are two reasons for highlighting the level and type of awards earned and share of all awards earned. First, if veterans are disproportionately earning certain types of degrees it might speak to "mechanisms" or societal level factors that impact employment/type of employment sought (Anderson & Mitchell, 1992; Goldberg & Warner, 1987; Kleykamp, 2007). These factors may include stigma, societal displeasure with unfavorable wars, war related injuries/illnesses, being typecast into more agentic careers (see Definition of Terms), and other factors. Second, disproportionately earned degrees may indicate veterans' lack of career clarity or struggle with military to civilian career transfer (Boyle, 2014; Keeling, Kintzle, & Castro, 2018). Further research is required to better understand factors impacting postsecondary degree decision-making of veterans.

The top three certificate and associate's degrees earned by veterans at public 2-year colleges in Massachusetts include health professions, homeland security/law enforcement, and

engineering technologies (Table 6). Awards are categorized by Classification of Instructional Programs (CIP), a Department of Education classification system. This analysis indicates that undergraduate veterans disproportionately earn certificate and associate's degrees in CIP 43. Homeland security/Law enforcement when compared to Student Veterans of America (SVA) estimates that veterans make up three-to-four percent of higher education students (SVA, 2016).

Table 6.1 expresses the number of STEM certificates and degrees earned by veterans and Table 6.2 expresses the share of all STEM certificates and degrees earned by veterans. When comparing the share of STEM awards to the percentage of veterans enrolled in higher education, it appears as though veterans are underrepresented in earning STEM awards, except for short-term certificate programs and associate's degrees. These results may speak to lack of civilian career clarity and potentially civilian vocational identity.

Valuable future research includes exploring correlations between degree selection and Gulf War Era II (GWII) veterans unemployment rates. Over a five-year period, GWII veterans' average unemployment rate was 10.3 percent, compared to 8.3 percent for non-veterans (Collins et al., 2014). The employment gap between veterans and non-veterans has been persistent despite numerous federal programs, benefits, and services supporting veterans transitions (Table 6.3). Veterans employment and education outcome measures indicate that they struggle during their transition out of the military and back into civilian society. This struggle includes higher unemployment rates, lower second-year retention rates in postsecondary programs, disproportionate enrollment in community colleges, disproportionate enrollment in remedial course-work, and disproportionate completion of certain degrees. It is currently not clear which factors play significant roles in these outcomes. The literature review contains potential factors

that may contribute to these struggles. Currently, it is unknown the extent to which these factors impact veterans, if at all, or the relationship between these factors.

Table 6.3

Federal Employment-Related Support for Veterans (Collins et al., 2014)

Federal Programs/ Benefits/ Services	**Program Description**	**Federal Agency**
Transition Assistance Program (TAP)/Transition Goals Plans Success (GPS)	This is a mandatory program provided to military service members as they are exiting military service. GPS is an updated career-readiness curriculum within the TAPS program. TAPS is a 5-day program containing: employment workshops (24-hours), VA benefits (6-hours), financial planning (4-hours), pre-separation counseling (4 hours), military-to-civilian skills gap analysis (2 hours), and resiliency transition training (1 hour).	Department of Defense (DOD, Department of Labor (DOL), Veterans Affairs (VA), and Department of Homeland Security (DHS).
G.I. Bill - Educational Benefits	G.I. Bill Benefits provide funds for veterans to pay for educational costs as well as living expenses while enrolled in educational programs. *The educational assistance programs covered under the GI Bill (Post-9/11, Montgomery) were designed to assist veterans in avoiding unemployment and support veterans' adjustment back to civilian society.*	VA
Local Veterans Employment Representatives (LVER)/ Disabled Veterans Outreach Program (DVOP)	Services provided by LVERs are focused on assisting veterans in securing employment in their local area. DVOP services include case management, employment counseling, job search assistance, and other employment related services to address veterans unemployment.	DOL Veterans Employment and Training Service (VETS)
Small Business Administration (SBA) Veterans Programs	SBA programs are focused on supporting veterans in developing business plans, financing small businesses, and acquiring federal contracts. This includes the SBA Patriot Express Loan Guaranty Program which provides guaranteed loans to veterans for business needs.	SBA
Vocational	VR&E services include provision of training, counseling,	VA

Rehabilitation and Employment (VR&E)	and support focused on gaining employment. Veterans with service-connected disabilities and an employment handicap are offered services to support gaining employment as well as education/retraining to become eligible for employment.	
Veterans Upward Bound (VUB)	VUB services focus on academic preparation of veterans for postsecondary programs. VUB is focused on servicing low-income and/or first generation veterans.	Department of Education

Military Culture

Research associated with student veterans acknowledges that the military has a unique culture, and veterans are more likely to be successful in postsecondary programs if their transition from military includes acceptance of civilian cultural norms (Ackerman, DiRamio, & Mitchell, 2009; DiRamio, Ackerman, & Mitchell, 2008; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008; McBain, Kim, Cook, & Snead, 2009; McCready, B., & University of Wisconsin-Madison, 2010; Ness & Vroman, 2014).

Defining military culture and distinguishing how it is similar and different from civilian culture is complex and nuanced. Culture refers to common environmental understandings (collective sense-making), which relates to values and priorities (Soeters, Winslow, & Weibull, 2003). For the purposes of this study, culture is defined as, “the collective programming of the mind, which distinguishes the members of one group or category of people from another” (Hofstede, 1991, p. 5). One of the purposes of this study is to highlight differences between military and civilian cultures on the macro level, which may factor into acculturative stress experienced during reintegration. The researcher recognizes subcultures (differentiation) and

loose connections (multiplicity of views) within each group, but due to the focus of this study will refrain from expounding about them.

Literature exploring military organization and culture highlight three distinct cultural attributes: communal lifestyle, hierarchical structure, and discipline orientation (Feaver & Kohn, 2000; Holsti, 1998; Lang, 1965; Moskos, 1973; Soeters, Winslow, & Weibull, 2003). According to Lang (1965), communal lifestyle showcases one of the clearest cultural differences between military and civilian societies. Within military organizations, employees tend to be fully oriented toward the goal of the institution (Moskos, 1973; Soeters, Winslow, & Weibull, 2003).

According to Lang (1965), communal lifestyle showcases one of the clearest cultural differences between military and civilian societies. Within military organizations, employees tend to be fully oriented toward the goal of the institution (Moskos, 1973; Soeters, Winslow, & Weibull, 2003). Military institutions have control over leisure time and activities, family matters, salary and promotions, and living conditions. Occupational (military) life and personal life are intertwined, nearly to the point of being indistinguishable. Essentially, a military "job" transforms an employee from an individual into a member in communal life (Moskos & Wood, 1988; Soeters, 1997). In contrast, civilian institutions tend to emphasize private life, incentivize leisure time, and offer performance-based bonuses or salary increases (Soeters, 1997).

There is little doubt that military veterans are a unique population within American society. Part of the sacrifice of military service is the voluntary separation from civilian society. From initial training onward, service members are expected to adopt a culture and set of values that are very different from civilian culture (Ackerman, DiRamio, & Mitchell, 2009; DiRamio, Ackerman, & Mitchell, 2008; Heath et al., 2017; Skopp et al., 2012) .

The culture of active-duty military life is structured around training and preparation for deployments (i.e. leaving family and friends for significant lengths of time to travel to unstable areas of the world, and experiencing prolonged periods in high-stress environments). Military service members face cultural dissonance between their first culture (military) and their second culture (civilian) as they transition. Leaving the military entails more than just quitting a job; they are leaving their social network, familiar cultural values, and understanding of how to be successful (Heath et al., 2017; Skopp et al., 2012).

Studies report that undergraduate veterans are concerned about their ability to understand and successfully navigate the culture of higher education (Ackerman et al., 2009; Anderson, 2013; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008). Veterans perceive that college campuses are slow-moving, loosely organized, and too politically correct (Ackerman et al., 2009; Anderson, 2013; DiRamio et al., 2008; Galor & Hentschel, 2012; Gati, Ryzhik & Vertsberger, 2013; McBain, L., 2008). Literature recommendations include development of training on military culture for campus faculty and staff to better understand what military culture is and ways to engage with veterans on their respective campuses.

Societal Factors

Stereotypes (See Definition of Terms) of veterans have been studied and the following are accepted within literature: veterans tend to have mental health issues, are more prone to violence, are less educated, are less complex individuals (monolith identity), and are generally less gifted at engaging with others (Dandeker et al., 2006; Elliot, Gonzales, & Larsen, 2011; Rumann & Hamrick, 2010; Schmader & Johns, 2003; Steele, 2001; Stone & Stone, 2015). These

beliefs, or stereotypes, could be due to lack of awareness of military life, due to the significant gap between military and civilian cultures, or other factors (Hines et al., 2015; Liebert & Golby, 2017; and Pfaff, 2016).

Impact of Societal Stereotyping

It is not currently clear how these stereotypes influence hiring or promotion-related decisions about veterans, or how stereotypical perceptions of veterans affect their perceived suitability for specific careers (Stone et al., 2018; Stone & Stone, 2015). It is known that stereotyping tends to contain some truth about an individual or represented group, which is particularly problematic when an entire group is assigned positive or negative characteristics (Parrot et al., 2019).

One recent study draws on the Theory of Dyadic Morality (TDM), which examines moral character, and how people perceive and organize others into mental states. TDM poses two dimensions of mental state used for understanding others: agency and experience. Agency is the ability to plan and act. Experience is the ability to feel sensations and emotions. Shepherd et al. (2019) shows evidence of veterans being stereotyped as heroes who take action and get things done, but also are somewhat callous and insensitive to the feelings of others. Additionally, supervisors, recruiters, and senior leaders see veterans as more agentic (planners and actors) and less capable of feeling than non-veterans (Shepard et al., 2019). This observation of veteran stereotypes is consistent with past observations of veterans (Stone et al., 2018), which includes being perceived as having a strong, disciplined work ethic, and being able to follow procedures; yet, veterans are also perceived as unfeeling, lacking social skills, and lacking the ability to

connect with others (Dillon, 2017; Harrell & Berglass, 2012; Keeling et al., 2018; Stone et al., 2018).

Labor force data supports the above observations. Veterans are over-represented in career fields that require more agency (e.g. maintenance, manufacturing), while being underrepresented in career fields that require high levels of experience or feeling (e.g. health care, education, personal care) (Dillon, 2017; Harrell & Berglass, 2012; Keeling et al., 2018; Stone et al., 2018). Currently, it is not clear to what extent societal factors play in this over-representation (i.e. self-selection, societal funneling, self-perceived stigma, stereotyping, and others).

A recent study indicates that self-selection does not account for external invalidation of veterans' qualifications. Human Resources (HR) staff were asked to review application information, including resumes and cover letters. Applications that included military experience decreased the perceived fit for careers that required expressing or understanding emotion. This bias occurred regardless of the applicants' interests, education, or additional qualifications (Shepherd et al., 2019).

Overlying this bias with the current job market could help explain some of veterans' difficulty gaining meaningful employment. Of the top one-hundred desirable careers (U.S. News and World Report, 2018), the top ten careers all require more feeling over agency. These top ten positions were ranked as being less suitable for veterans by human resources professionals. In contrast, the bottom ten careers on this list, which required more agency than feeling, were ranked more suitable for veterans by human resources professionals. When looking at the top one-hundred jobs collectively, more than half are categorized as requiring experience (emotion

and interpersonal connectedness), whereas only six were within the domains of engineering, trade, and construction/maintenance, which require agency.

If employers hold stereotypical beliefs about veterans, this will likely impact how veterans experience interactions with employers. For example, a recent survey of employers found that only 26 percent believed that veterans were a strategic asset to their organization (Dillon, 2017). This could mean that veterans have to work extra hard to prove their worth and value to a prospective or current employer. This societal factor impacts individuals who perceive stereotype threat (Steele, 1997; and Spencer, Logel, & Davies, 2016). Individuals who perceive negative stereotypes become vigilant in looking for cues associated with their performance. This extra vigilance can cause heightened levels of anxiety and stress arousal, which can impede performance (Steele, 2011).

These findings are consistent with additional research addressing stereotype threat. Stereotype threat can compound feelings of insecurity for veterans when entering the workplace as well as entering/re-entering higher education (Elliott et al., 2011; E. Moore, 2017; Keeling et al., 2018; Rumann & Hamrick, 2010). Veterans currently report decreased job satisfaction and supervisory support relative to non-veterans (organizational cultural fit/stereotyping) (Teclaw, et al., 2016).

Organizations with strong cultures can lead new employees to question how and where they fit in, and if they belong (Cable & Parsons, 2001). Belonging is a key predictor of student success (Walton & Cohen, 2017) as well as employee success (Knapp, Smith, & Sprinkle, 2014). Belongingness has been studied in active-duty military contexts (military retention, occupation satisfaction, and suicide mitigation (Overdale & Gardner, 2012; Rosen et al., 2003; Wolfe-Clark

& Bryan, 2017). Belongingness has yet to be studied in association with veterans in higher education or the workforce.

Veterans do possess counter-stereotypic qualities that can be used to reframe their identity in society writ large, and more specifically with employers and educators. These qualities include: being more accepting of other cultures (Stone & Stone, 2015); more adaptable to change (Oprins, van den Bosch, & Venrooij, 2018); and more emotionally resilient than their civilian counterparts (Dillon, 2017). Currently, there is a need to research and understand factors shaping hiring decisions around veterans, generally speaking. Specifically, there is a need to better understand how perceptions or stereotypes of veterans along different dimensions affect their perceived suitability for specific careers (Stone et al., 2018; Stone & Stone, 2015).

For example, it is known that there is a social desirability bias in people's willingness to socially engage with veterans and offer tangible support (Kleykamp, Hipes, & MacLean, 2018). Dillon (2017) found that people are very supportive of legislation to support veterans through tax dollars, but are less willing to provide substantial support themselves, such as corporate mentoring, direct hiring policies, and creation of organizational affinity groups. Additional research is needed to clarify what factors might be impacting society's perception of veterans as either not needing support (veterans don't actually suffer), or society's unwillingness to provide support directly (veterans are dangerous).

Moral Agent and Dehumanization

It should be clear that veterans who have served in the military post-September 11, 2001 have been treated differently than veterans of Vietnam. These Post-9/11 veterans are overwhelmingly thought of positively, as heroes. Jordan's research (2012) found that veterans are

held in a comparable regard to police officers, firefighters, and doctors, with 86 percent of respondents perceiving them as valuable. Veterans were thought of as “heroic and noble doers who can plan, take action, and get things done.” (Shepherd, 2019, p. 3).

While one could consider these traits as positive, and something valuable to employers, there are downsides to being considered a moral agent. Literature finds that moral agents are seen as less able to experience emotions or be impacted by emotions (Gray & Wegner, 2011; 2012). A practical way of imagining moral agents is as robotic; they can act, but do not feel. There is a significant gap in Social Psychology and Organizational Behavior literature addressing societal perceptions of veterans, as well as the challenges faced in the civilian workforce. Included in this gap is the lack of theory-driven research that could better address the broader (societal) consequences and impact of war, though there have been piecemeal studies. Military research has explored topics of stereotyping and discrimination, but only between and among subcultures within the context of active duty military culture (gender, race, mental health stereotypes) (Bergman et al., 2017; Galovski & Lyons, 2004).

When society perceives active duty service members as being moral agents (agentic) and relatively unfeeling, this perception remains with veterans as they re-enter society. This example of moral typecasting is consistent with other theories and research associated with other populations (Fiske et al., 2002; Holoien & Fiske, 2013; and Jost et al., 2005). Moral typecasting means “that the more someone is seen as a moral agent (hero or villain) then the less he or she can be seen as a moral patient (a victim or beneficiary)” (Gray & Wegner, 2009, p. 505). According to the Veterans Well-Being Survey (Edelman, 2016), 75 percent of non-veterans and

84 percent of employers perceive veterans as heroes (or moral agents). This society-level misperception of veterans' collective identity is a significant issue that must be explored further.

Stereotyped groups routinely fall into the categories of high-warmth, low-competence (example: elderly), or low-warmth, high competence (i.e. wealthy upper class) (Fiske et al., 2012; Jost et al., 2005). In general, women are perceived as high-warmth, low-competence, while men are perceived as low-warmth, high competence (Cuddy et al., 2011; Jost & Kay, 2005). To date, literature has not applied modern psychological stereotyped theory to the veteran population, which makes it difficult to understand how society perceives this group and what misperceptions need to be clarified.

Regardless, employment data routinely show employment rate gaps between veterans and non-veterans (Bureau of Labor Statistics, 2015; Joseph, 1985). It is also common for veterans to struggle with transitioning military skills to the civilian workforce (Boyle, 2014; Keeling, Kintzle, & Castro, 2018). Theories of moral typecasting and mechanistic dehumanization may help explain some of the difficulties faced by veterans, but these have yet to be explored. Given the lack of emotion and propensity for stoicism that people associate with the military, employers may anticipate difficulty communicating with veterans, and veterans may have difficulty expressing themselves with co-workers or staff (Elliott, Gonzalez, & Larsen, 2011; Gray et al., 2011; Preston & de Waal, 2001; Teclaw, Osatuke, & Ramsel, 2016; Yanchus et al., 2018). Emotional intelligence and empathy are significantly valued traits, and will become even more valuable (Ashkanasy & Daus, 2002; Ashoka 2013) as job creation and growth continues across the social-emotional domain of occupations, while automation and artificial intelligence (AI)

consume jobs that require rote procedures, obedience, or working in solitude (Deming, 2015; Sherk, 2010).

In Goodwin et al.'s (2014) comparative study of veterans and non-veterans on the morality scale, veterans were seen as more moral than non-veterans. Veterans were also perceived as more mechanistic (robotic), which is consistent with the view that veterans are perceived as capable of carrying out tasks, but lacking in feeling or emotion (Goodwin et al., 2014).

Career Fit Typecasting

Shepherd et al. (2019) found connections between TDM and organizational literature associated with Holland's RIASEC model of vocational choice. Holland's theory posits that people fit into six personality categories, comprising the acronym RIASEC: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Their study hypothesized that realistic careers (working with things) and conventional careers (well-structured environments) are seen as requiring agency, but very little feeling. This is due to the emphasis on action, linearity, tangible skills, and a lack of need for emotionality or sociability.

Study results found higher fit for veterans in realistic careers, followed by conventional careers, and then social careers (Fiske et al., 2002; Gray & Wegner, 2009; 2011; Schein & Gray, 2017). Drawing on the RIASEC model (Holland, 1973), Shepherd et al.'s (2019) study finds society perceives veterans to be a better fit for hands-on jobs requiring agency, but minimal social interaction (RC careers). Veterans are also perceived as being a worse fit for jobs requiring emotion and social interaction (SA careers), and the ability to feel and engage with others (Shepherd et al., 2019).

While employers' interest in hiring emotionally intelligent employees is on an upward trend, veterans continue to face employment-related issues. Veterans encounter numerous barriers to employment, some of which are due to employers' perceptions of their lack of interpersonal skills (Ashkanasy & Daus, 2002; Ashoka 2013; Freshman & Rubino, 2002; Ovans, 2015). It is currently not known how moral typecasting impacts veterans' career decision-making or vocational identity. What is known about those who work in high-agency, low-feeling occupations is that these are the careers with the highest suicide rates (Center for Disease Control, 2016). According to the CDC, careers such as maintenance/repair, construction, forestry, and farming do not lend themselves to positive mental health (CDC, 2016), due to factors of lengthy isolation and job instability.

Individual Factors

Similar to societal factors, there are a number of contributing individual factors that impact veterans' military-civilian transition, civilian vocational identity, and success in higher education. The following factors listed are not intended to be an exhaustive list of influences on veterans' journeys out of the military, through higher education, and into the civilian workforce; rather, these factors are deemed important to the researcher's theoretical framework (Figure 1): self-identity, acculturation stress, sense of belonging, vocational identity, combat-related injuries, and student demographic status such as non-traditional aged learner.

Sense of Belonging

Recent studies have found that social belonging, in the context of higher education, is the strongest predictors of persistence and completion (Asher & Weeks, 2014; Dweck, 2014; Elliot & Dweck, 2005; Good, Rattan, & Dweck, 2012; Pascarella & Chapman, 1983; Silvia & White,

2013; Sulea et al., 2015; Weiner, 2013). On a societal level, a sense of belonging is also important in civilian career fields and communities. Given their struggles re-acclimating back to civilian society, it is likely that veterans may have a reduced sense of belonging in college, companies, and communities. Currently, this is an under-researched aspect of veterans' transition experience in college, the workforce, and communities in which they live. It is likely that the following factors impact veterans' sense of belonging, to some extent: stereotype threat, self-stigma, discrimination (real or perceived), and/or cultural differences.

Veterans have a tendency to focus on collective workplace success over individual workplace achievement. Veterans' workplace goals may make them feel, or cause co-workers to feel, as if they do not belong (Keeling et al., 2018; Rausch, 2014; T. R. Smith & True, 2014; Stephens & Townsend, 2015). Veterans self-report a greater willingness to volunteer within their communities than non-veterans (Ortosky, Sherman, & Kay, 2018). Veterans' cultural values of collectivism and civility may reduce their individual sense of belonging. Research on first-generation college students found that their cultural values led to a lesser sense of belonging within higher education (Stephens et al., 2012). Evidence indicates that belongingness interventions developed for underrepresented minority college students are effective in improving academic performance, as well as sense of belonging (Yeager et al., 2016).

Yeager et al.'s (2011) intervention assumption associated with academic improvement includes the need to address socio-emotional and psychological factors. Until this time, the majority of literature on improvement of study skills or learning did not address students' underlying beliefs about themselves. Dweck's work (2014) on mindset coincides with Yeager's work on students' sense of belonging in college. Dweck's landmark research on fixed vs. growth

mindset theory highlights the significant importance of how mindset impacts learning, growth, resilience, and achievement. Yeager et al. (2013) found that key obstacles to students' success include: negative self-perceptions in math courses, doubts about the relevance of course materials, and lack of connection to peers and instructors (sense of belonging). Sense of belonging is a critical component to a growth mindset. Walton and Cohen (2014) found that the success of college group work is more than just collaboration; it is the opportunity for students to feel like they belong in the group. UW-Madison (Juvonen, 2006) student success research found that even "trivial connections" to peers increased students' sense of belonging and their motivation to achieve academically.

Sense of belonging is a significant and prolonged barrier for women attempting to access the Science, Technology, Engineering, and Mathematics (STEM) fields (Dar-Nimrod & Heine, 2006; Good, Aronson, & Harder, 2008; Spencer, Steele, & Quinn, 1999; and Steele & Aronson, 1995). A recent study found that students' perceptions of two environmental factors were significant in impacting women's sense of belonging : 1.) the belief that math is a fixed trait; and 2.) the belief that women have less mathematical ability than men. Combined, these negative stereotypes have had a significant and lasting impact on women's sense of belonging in math (subject specific) and STEM careers. For example, a study seeking to better understand the importance of a sense of belonging in math focused on the relationship between that sense of belonging and students' desire to pursue math-related fields in the future (Goodenow, 1993; Lee & Robbins, 1995). Test-retest reliability (.87) and predictive validity (.42) of "The Sense of Belonging to Math" scale was consistent with the study's predictions. Sense of belonging in math was the strongest predictor of the intent to pursue math for both men and women (Eccles &

Jacobs, 1986; Good, 2010; Good, Rattan, & Dweck, 2010). It is important to highlight that sense of belonging was a stronger predictor than math identification, which measures self-perception identity as how important it is to someone that they are good at math.

While it is unknown how perceived sense of belonging impacts undergraduate veterans in higher education or society in general, it is reasonable to believe that their perception of belongingness is a factor. Sense of belonging has been found to be an important variable in the STEM field for other populations. This understanding has led to the development of interventions which have reduced gaps in enrollment and completion of STEM degrees through reduction of perceived stereotypes. Future research on veterans' academic aspirations and achievement and sense of belonging would help to better understand if undergraduate veterans perceive they are limited in their ability (Aronson, 1998; Blackwell et al., 2007; Good et al., 2003). Veterans over-representation in specific degree completion (Table 6.3) may indicate they do not feel welcome in other academic programs.

Non-traditional Learners

Student bodies within higher education have significantly shifted over time due to factors such as the civil rights movement which sought to provide equal rights and privileges to women and minorities (Falk & Blaylock, 2010). These societal shifts brought about a shift in student demographics also includes an influx of non-traditional students, which is a generic term for students who fall outside of the criteria of a traditional student (Braxton et al., 2008; Falk & Blaylock, 2010). Traditional students are typically conceptualized as eighteen-to-twenty-two years of age; enrolled full-time in degree programs; live on-campus; and seek opportunities to

have extensive interactions with faculty, staff, and fellow students (Falk & Blaylock, 2010; Pascarella & Terenzini, 1998; Strage, 2008).

Historically, veteran students have always fit the criteria of non-traditional students, even before the term was commonly used. The first significant wave of non-traditional students flooded college and university campuses after World War II (WWII) (Falk & Blaylock, 2010; Zook, 1947). WWII veterans were older than traditional undergraduates, and had a sense of urgency toward their need to complete their coursework as quickly as possible to catch up with those who had not served in the war. Over 2.2 million WWII veterans attended college, a significant jump in enrollment that threatened the existing culture and community of traditional-age undergraduates (Olsen, 1994; Stanley, 2001; Zook, 1947). More recently, Kleykamp (2013) found that transitioning veterans are more than twice as likely to be enrolled in college than non-veterans of similar age groups. It is more likely that undergraduate veterans, non-traditional students, are enrolled in courses alongside traditional aged undergraduate students. It is reasonable to assume that the age differences between veterans and non-veterans has an impact on the development of peer social support.

Unfortunately, while student demographics have shifted towards a higher percentage of non-traditional students, college and university leadership has been slow to react to this shift with meaningful modifications to policies and practices. Universities need to demonstrate mindfulness and respect for all groups represented within their student bodies by developing practices and policies that meet the needs and concerns of those students (Braxton et al., 2008).

Veterans' Civilian Career Difficulties

Veterans have difficulty obtaining and engaging in civilian careers. Evidence of this difficulty is seen in labor market statistics. In 2014-15, 7.2 percent of Gulf War II veterans were unemployed, compared to 6.0 percent of non-veterans (U.S. Bureau of Labor Statistics, 2016). Additionally, veterans are significantly less likely to participate in the labor force: they have a 50.6 percent participation rate compared with a 65.7 percent of non-veterans (U.S. Bureau of Labor Statistics, 2016). Anecdotal evidence includes the frustrations expressed by veterans attempting to find suitable employment, and high rates of employment turnover for veterans within civilian employment (Kleykamp, 2013).

There are likely many factors impacting veterans' ability to gain and keep civilian employment; this study recognizes that difficulties exist, and provides evidence of known factors, connecting them to the posited framework of acculturation (Figure 1): organizing known factors into individual and societal categories. It is worth noting that factors impacting veterans' transition experiences have been unevenly studied. Two factors, trauma experiences and differential characteristics of volunteer military service members, have been studied extensively. Other factors, such as military socialization, self-perceived stigma, stereotype threat, and discrimination based on veteran/military status, have not been as thoroughly studied. Current literature highlights the general lack of controlled, systematic investigations on intervention effectiveness associated with the above factors (Brockner & Sherman, 2020; Cohen & Sherman, 2014; Walton & Walton, 2018).

Career Maturity

For more than a half-century, there has been an evolution of thought and practice around career development. Super (1957) created the foundational construct of career maturity, which led to the Career Development Inventory (CDI). The inventory was designed to measure four dimensions within career decision-making processes: career planning, career exploration, career decision-making, and world-of-work information. These scores produced a "vocational maturity quotient," which measures vocational choices based on an individual's chronological age (Super, 1957, p. 186).

Crites (1965) believed that career maturity could be best measured through two dimensions: career choice content, and career choice process. He would later publish the Career Maturity Inventory (CMI), which measures occupational knowledge and planning ability (Crites, 1978). Both of these foundational constructs are representative of the pervasive structure of the world-of-work at that time; career readiness was connected to making decisions within a specific life developmental stage (Patton & Creed, 2001).

A more recent understanding of career decision-making has moved away from the assumption that age is indicative of career maturity (Gati, Krausz & Osipow, 1996; Patton & Creed, 2000). The Career Decision-Making Difficulties Questionnaire (CDDQ) is the most recent example, which views a career as a series of choices made over an individual's life span (Fouad & Bynner, 2008; Konstam & Lehmann, 2010). In essence, this change acknowledges that adulthood does not guarantee career maturity, career decision-making has become more important to career maturity than chronological age. This understanding of career maturity may be especially important for undergraduate veterans, non-traditional aged students who may be

unfamiliar with civilian career development processes. Career practitioners working with undergraduate veterans may find the CDDQ assessment and career maturity interventions to be significantly beneficial.

Career Decision-Making

Changes to the workforce have led to an increase in the number of transitions from one job to another during an individual's lifetime (Bright & Prior, 2005). According to the U.S. Dept of Labor, approximately 23 percent of wage and salary workers aged 16 and up remained in their job position for a period of 12 months or fewer (DOL, 2008). The results of more frequent job turnover are more career-related decisions necessary for an individual to make, which can lead to more frequent career-related decision-making difficulties. Career-related decision-making difficulties could be interpreted as hurdles that can prevent individuals from making potentially better career-related decisions, or even any decision at all (Gati, Krausz, & Osipow, 1996; Slaney, 1988).

The career decision-making process is generally considered to contain three phases: pre-decision, decision, and post-decision (Walsh & Savickas, 2005). Researchers and career counselors are more concerned with the factors involved in decision-making processes than the actual decisions. The majority of literature around career decision-making focuses on pre-decision. The study of the pre-decision phase involves concepts such as personality type, personal values, and intrinsic motivations.

Recently, research has found that career decision-making difficulty is a barrier to successful student outcomes; however, successful interventions have the potential to address career decision-making difficulties (Gibbons & Borders, 2010; Greenbank & Hepworth, 2008;

Hughes, Gibbons & Mynatt, 2013). The following sections will address more details on career decision-making barriers and interventions, including career decision-making self efficacy, decision-making readiness, and identity (self and vocational).

Career Decision-Making Self Efficacy

The growing emphasis on standards and accountability within higher education has forced leadership to develop strategies focused on improving successful student outcomes, academic performance, and graduation percentages (Bogan, 2011). For more than two decades, student graduation percentages from four-year colleges have been stagnant or trending downward. Concurrently, retention numbers have remained significantly higher, creating a dissonance (ACE, 2014). Recent literature focused on understanding this dissonance found significant correlation between career indecision and student outcomes.

Although the causes of career indecision are complex, one of the major contributing factors for college students is career decision-making self-efficacy, or a person's confidence in their ability to engage in career decision-making tasks (Bandura, 1986; Nauta & Kahn, 2007; Taylor & Betz, 1983). Career decision-making self-efficacy is a foundational factor in the career decision-making process. College students with lower self-efficacy tend to avoid altogether engaging in decision-making processes such as career exploration or making commitments to a career path,, thus reducing their opportunities for obtaining a desired career (Abrams, Lee, Brown, & Carr, 2015; Blustein, Devenis, & Kidney, 1989; Nauta & Kahn, 2007).

Research indicates that career indecision is common among college students, traditional and non-traditional alike. While common, career indecision is associated with a number of negative traits such as anxiety, neuroticism, and over-engagement (Ghosh & Fouad, 2015;

National Survey of Student Engagement, 2010; Taylor & Betz, 1983). As a result, students with lower levels of career decision-making self-efficacy are more likely to face difficulty with career maturity, successful transitions to college, and clarifying educational plans; yet, higher education has been tentative to incorporate career decision-making support within structured academic programming (Abrams, Lee, Brown, & Carr, 2015).

Ideal Decision-Maker and Lack of Readiness

Researchers studying the field of career development and career counseling hold various perspectives on what comprise the characteristics of ideal decision-makers based on their understanding of what factors influence career decision-making by the three phases (Figure 4) (Amir, Gati & Kleiman, 2008; Kleiman, Gati, Peterson, Sampson, Reardon & Lenz, 2004).

The Career Decision-Making Difficulties Questionnaire contains a number of similarities to the Career Thoughts Inventory, including shared terminology. For the purpose of this review, an ideal decision-maker will follow the CDDQ definition: an individual who is (a) aware of the need to make a career decision, (b) ready to make a decision, and (c) capable of making a "optimal" decision (Kleiman et al., 2004; Taber, 2013).

The CDDQ and CTI use the same term for a stage in the decision-making process, lack of readiness, but the term has different meanings in each. In the CDDQ, lack of readiness refers to the difficulties that arise prior to entering the decision-making process. Alternatively, in CTI, lack of readiness refers to an individual's inability to make a decision when engaged in the decision-making process (Kleiman et al., 2004; Taber, 2013).

Conceptual Model

Over the past half century, a number of conceptual models were developed to provide descriptions of the factors that influence career decision-making. This review is focused on the factors incorporated within the CDDQ (Figure 4). Gati et al. (1996) developed a theoretical taxonomy of decision-making difficulties built on the foundation of decision theory (Lehmann, 1957). The career decision-making difficulties model contains three major categories: lack of readiness, lack of information, and inconsistent information (Gati, 1996; Gati et al., 1996). One aspect that makes CDDQ unique is its ability to measure the lack of readiness to make a career decision prior to engaging in the decision-making process. The lack of readiness category contains three potential difficulties: lack of motivation, indecisiveness, and dysfunctional myths. The synthesis of literature includes (a) effects of technology, (b) indecision in life stages, and (c) indecisiveness/indecision.

Figure 4

Career Decision Making Difficulties (Gati, 1996)

Pre-Process	**During the Process**	
Readiness Issues	*Information Deficiency*	*Information Inconsistency*
● Motivation ● Indecisiveness ● Dysfunctional Myths	● Self-Identity ● Occupational Choices ● Information Gathering ● Decision-making Process	● Unreliable Information ● Internal Conflicts ● External Conflicts

Identity, Self Efficacy, and Career Indecision

A number of studies have found that identity status, involving either a lack of exploration (self and career) or a lack of commitment, to be associated with greater career indecision (Blustein et al., 1989; Guerra & Braungart-Rieker, 1999; Lucas, 1997; Schmitt-Rodermund & Vondracek, 1999; Vondracek, Schulenberg, Skorikov, Gillespie, & Wahlheim, 1995; Wallace-Broscious, Serafica, & Osipow, 1994). Research on occupational development and career choice provides substantial evidence that motivational factors, such as career goals and career decision-making self-efficacy, impact decision-making (Campbell, 2007). Holland (1997) found that individuals with generally undefined self-identities, unstable or unclear pictures of themselves, tend to lack self-efficacy.

To attain a stable self-identity, individuals need to progress through a series of stages over time (Marcia, 1980). Marcia's (1980) stages include: (a) diffusion - individuals lack commitment to an identity due to lack of exploration; (b) foreclosure - individuals make commitments that are based on little or no self-exploration; (c) moratorium - individuals make no commitment while currently exploring choices and options; (d) achievement - individuals make commitments based on significant self- and choice-exploration (Marcia, 1980). Marcia's four stages (1980) slightly differ from other researchers, yet tend to focus on the same competencies. For example, Crites (1976) research identifies five tasks that should be involved in career decision-making: (1) accurate self-appraisal, (2) gathering occupational information, (3) goal-setting, (4) making plans for the future, and (5) problem-solving. Taylor and Betz (1983), who built their Career Decision Self-Efficacy Scale off of Crites's foundational work, found that high career decision self-efficacy refers to high efficacy in all of these task areas.

Foundational theories on career decision-making processes focused on identification of decided and undecided individuals were derived from the understanding that career decisions were made during one life stage (Holland, 1977; Slaney, 1988; Super, 1957). Recently, researchers have made distinctions between undecidedness, temporary developmental phases throughout life stages, indecisiveness, and personality variables affecting decision-making processes (Di Fabio et al., 2015; Gait, 2013; Saka & Gati, 2007).

Specifically, research indicates that extroversion and neuroticism measures (Costa & McCrea, 1992) are significant predictors of career decision-making difficulties (Albion & Fogarty, 2002; Di Fabio et al., 2013; Feldman, 2003; Martincin & Stead, 2015). Extraverted individuals (outgoing, social, and open) tend to seek more social support when facing difficulties in job searches, which is associated with better career decision-making performance. Neurotic individuals (anxious, insecure, self-conscious, and vulnerable) tend to be more vigilant in job searching and more impulsive in decision-making, which is associated with underperformance and indecision (Albion & Fogarty, 2002; Caldwell & Burger, 1998; Kanfer et al., 2001; Martincin & Stead, 2015).

Current research has only just begun to understand the connection between personality type and career decision-making. Future research and practice in career counseling would be well-served to continue to focus on the relationship between personality variables and career decision-making difficulties. More research will provide a better understanding of how specific personality types affect career decision-making, and how to develop interventions that are more relevant in resolving or affecting decision-making difficulties.

Low-Income Students Career Decision-making

The majority of undergraduate veterans, 62 percent, also identify as first-generation college students (Clemens & Milsom, 2008). First-generation students express a number of challenges in college and career decision-making. Research on first-generation college students identifies characteristics negatively impacting college and career including: less familial knowledge of higher education, lower outcome expectations, complicated social transitions, and difficulties adapting to postsecondary education. These factors lead to higher dropout rates, and longer completion times (Braxton, Brier, & Stephanie, 2008; Engle & Tinto, 2008; Gibbons & Mynatt, 2013; Lombardi et al., 2012). As a result of these characteristics, low-income students are less likely to take unpaid internships and spend less time on social engagement, which negatively impacts career decision-making and career opportunities (Dietsche, 2012: Gibbons & Borders, 2010; Greenbank & Hepworth, 2008; and Soria & Stebleton, 2013).

Woodside et al. (2012) found that the career decision-making and maturity of first-generation males was significantly influenced by their fathers or other familial male influences. Family influence was more likely to impact career and degree selection than interactions with peers or faculty. Students who are not first-generation are also impacted by family influence, but are more open to non-familial recommendations (Braxton, Brier, & Stephanie, 2008; Engle & Tinto, 2008; Gibbons & Mynatt, 2013).

Gibbons and Borders (2010) found that first-generation college students anticipate different outcomes than non-first-generation college students. Their findings include evidence of significantly differing education and career goals between the two groups. The first-generation group anticipated completing just a four-year degree or less, while the non-first-generation group

anticipated completing a four-year degree and getting accepted into graduate school (Gibbons & Borders, 2010). This review is in agreement that undergraduate veterans are in need of support and services to improve their ability to complete their undergraduate degree programs. Most of the student veteran studies have focused on identifying the unique and complex characteristics of veterans as major factors contributing to their lack of academic success. This review suggests that factors shared with other populations (self efficacy, financial barriers, lack of college competency, etc) are associated with academic performance and degree completion.

Career Counseling and Development

In general student veterans have been addressed within higher education literature, but there is a noticeable gap in research addressing career development theories and career counseling practices specifically intended to support undergraduate veterans (Anderson, 2013). This section reviews career counseling and career development intervention impacts on higher education success for underprepared students. Students involved in the various studies represent a wide cross-section from higher education institutions in New England, the Midwest, the West Coast, and the United Kingdom (UK). Students were solicited for these studies in a variety of ways: online surveys, direct emails, direct requests, and/or mailed letters.

Career Development Interventions

Researchers confirm that career path decision-making is a significant developmental challenge that impacts a student's education and career goals (Bandura, 1986; Nauta & Kahn, 2007; Super, 1953). In general, over 50 percent of all degree-seeking college students change their major at least once, which suggests that undergraduate students entering college have some

level of career indecision. While indecision is sometimes applauded as a sign of open-mindedness, more often it is associated with anxiety and stress (Krumboltz, 1992).

Recently, colleges and universities have begun to view career decision-making assistance as a valuable resource for undergraduates (Micceri & Phelps, 2002). This shift in institutional practice aligns with current literature findings; career development and career transition training positively influences workforce readiness and college success for undergraduate students. (Boden, 2011; Gibbons & Borders, 2010; Soria & Stebleton, 2013; and Tirpak, 2011). Career development interventions can be scaled up to address the needs of most undergraduate students.

Gibbons and Border (2010) feel strongly that from a social-cognitive development perspective, career counseling is most beneficial at a young age. Younger students are more likely to involve their family members in conversations about careers and counseling than older, more independent students. Gibbons and Border (2010) posit that PFGCS may have already decided on a career path that does not include a postsecondary degree, thus rendering career counseling with the intentions of postsecondary pursuit as much less beneficial.

Veterans who joined the military instead of enrolling in college after high school may have missed out on career counseling before enlisting. Veterans' educational benefits encourage them to consider college after their military service, but veterans might not be very clear on what they want to do for a career post-military service. The researcher posits that an acculturative career planning framework (Figure 1) would provide much needed support that is somewhat unique to the military-to-civilian transition.

Student Veteran Career Development

Recent literature acknowledges the importance of career transition for veterans, and the current lack of research focused on this topic (Robertson et al., 2014). Specifically, the literature speaks to the need for collaboration between the Veterans Administration (VA), DOD, and career development researchers. Career development intervention research would significantly enhance the ability of professionals to begin to support unique populations' needs, and the special needs of sub-populations, including female veterans, disabled veterans, younger veterans, and retiring veterans. Comparison data between civilian and military career development support would be beneficial for understanding similarities and differences in population needs. Currently, there is no baseline data for specifically evaluating the needs of student veterans (Ackerman et al., 2009; and Robertson et al., 2014).

Veterans seem to be more likely to require remedial coursework (Table 2) (Smith, 2015). Currently, it is not known which factors contribute to this increased need for remediation. Possible factors include: time away from structured learning environments, non-traditional aged learners, high school GPA, high school courses taken, or others. Those who are placed into remedial coursework are less likely to be retained or graduate. Career counseling might increase confidence in their career choice, and improve their ability to persist through a degree program.

In an attempt to assist veterans in catching up with their peers, some veteran-focused organizations advocate for accelerating their college experience through provision of credit and/or fulfillment of internship requirements in exchange for the veterans' prior military service. While this advocacy has good intentions, accelerating a college experience can result in blurry or

incomplete career goals, which in turn could result in veterans completing misaligned degree programs (Borges, Richard, & Duffy, 2007; Savickas, 1997).

Conclusion

Transitioning veterans express frustration in finding suitable employment, and have high rates of turnover within civilian employment (Kleykamp, 2013). Currently, literature on career maturity and career selection does not specifically address the veteran population; yet, undergraduate veterans share a number of traits with others who struggle with career maturity, such as non-traditional, academically underprepared, low-income, and first-generation students. (Gibbons & Borders, 2010; Greenbank & Hepworth, 2008; Hughes, Gibbons & Mynatt, 2013; Reardon, Folsom, Lee & Clark, 2011; Soria & Stebleton, 2013).

While there is an abundance of literature exploring the relationship between career planning attitudes (career adaptability, career exploration, and career decisiveness), the existing literature does not pay enough attention to another very important career planning attitude, self-efficacy (Gunkel, Schlaegel, Langella, & Peluchette, 2010; Rottinghaus, Day & Brogen, 2005; Santos, 2003: Savickas, 1997). Studies that have investigated the effect of individual factors on career choice have mostly used either personality traits or motivational factors like goal orientation, goal decidedness, goal-setting, or goal instability (Creed, Macpherson, & Hood, 2001; Creed, Tilbury, Buys, & Crawford, 2009; Santos, 2003)

Emerging studies have found that college students with low levels of career decision-making self-efficacy are more likely to avoid career decision-making tasks such as degree selection, discovery of skills and interests, and actively gathering career information. When faced with difficulties, these students are likely to change their minds or adjust their goals

to avoid the challenge. Fortunately, career decision-making self-efficacy is adjustable and research has proven that workshops specifically focused on remedying career decision-making difficulties can increase self-efficacy (Fouad, Cotter, & Kantamneni, 2009). On a wide scale, higher education may benefit from developing or incorporating evaluations to screen incoming students on aspects of career decision-making self-efficacy. Systematic evaluations around career decision-making would improve awareness of students' needs and the ability of the school to provide support at the right time.

Acculturation

The acculturation process or associated stressors is a gap in current literature on student veterans. Current literature identifies veterans as a population with a history of difficulty transitioning back to society in general and higher education specifically, but has yet to identify or research the impact of acculturation on veterans' experiences in higher education. Due to the gap in literature addressing veterans' acculturation experiences, the researcher offers a review acculturation scholarship. This section will define acculturation and acculturation stress, identify acculturation strategies, and highlight each strategy's impact on students' experiences in higher education.

Acculturation and Communication

Acculturation is not a new concept or area of study, rather this concept appears in literature as early as the 1880s (Powell, 1880), focused on better understanding native tribal languages and culture. Scholarship became more prevalent in the 1930s, including the classic acculturation definition, "phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture

patterns of either or both groups (Redfield, Linton, and Herskovits, 1938, p. 149). Marden and Meyer (1968, p. 36) offer a modern definition of acculturation as, “the change in individuals whose primary learning has been in one culture and who take over traits from another culture”.

Formative acculturation research focuses on developing a better understanding of connections between communication and acculturation (Adler, 1975, 1987; Furnham and Bochner, 1986; Zaharna, 1989). Additional research broadens to examine psychological and sociological impacts and challenges acculturation present (Austin, 1983, 1986; Ward et al., 1998). Ward et al. (1998) find psychological adjustments to a new cultural environment tend to be linear and progressive; adjustment issues were more significant at the beginning and dissipated over time. *Austin’s research (1983, 1986) found cultural reentry to be a more challenging experience than experiencing a new culture for the first time (culture shock)*. Given that cultural reentry is the lived experience of a vast majority of veterans, it is surprising that subsequent studies have not yet addressed acculturation stress associated with veterans reentry into civilian society. A bulk of scholarship focuses on improved understanding of immigrant’s acculturation experiences with reinvigorated enthusiasm for better understanding communication/communication competence and acculturation. Gudykunst and Kim (1984) capture sentiments of the focus on this interest:

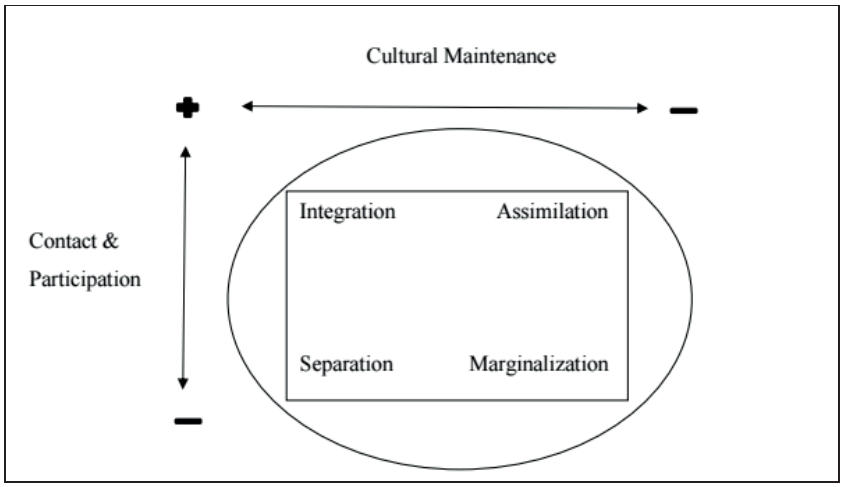
> At the heart of the interactive acculturation process lies the communication process linking strangers to the host cultural milieu. Acquisition of communicative competence by strangers is not only instrumental to all aspects of cultural adaptation but also indicative of the strangers’ accomplished acculturation. In other words, the degree to which strangers adapt to the host culture depends on their personal and social

> communication processes. At the same time, the adaptive changes that have already taken place are reflected in the strangers' communication patterns (p. 220).

Immigrant acculturation research highlights the sense of adriftness between two worlds (cultures). Adriftness caused by high degrees of uncertainty due to separation from their own culture's values and way of life (Caplan, 2007, Cespedes & Huey, 2008; Finch & Vega, 1999). Acculturation research also focuses on models and measurement of acculturation (Olmeda, 1979; Ramirez, 1984). Initially, three models of acculturation were accepted: uni-dimensional, bi-dimensional, and categorical. Berry's (1994, 1997) later research developed a more complex model, specifying four acculturation strategies: integration, separation, assimilation, and marginalization (see Definition of Terms). Berry (1997) posits that an individual's choice of strategy depends upon two factors: their cultural maintenance, or the level of importance of a cultural identity; and contact and participation, or the time and effort of involvement in a new culture (Figure 5).

Figure 5

Acculturation Strategies (Berry, 1997)



Acculturation Stress

Psychologist Ausubel (1960) is given credit for the first to use the expression acculturative stress within his research of Maori tribe's engagement with European culture. Similar to Berry's (1997) acculturation strategies (Figure 5), Ausubel (1960) identified three distinct approaches to acculturation. 1.) Resistive acculturation included physical withdrawal from the dominant culture, rejection of European values, and original cultural modification due to perception of on-going cultural oppression and depression. 2.) Assimilative acculturation describes the "gradual and insidious introduction of an attractive new culture, resulting in its complete acceptance" (p.221). And 3.) Adaptive acculturation which included a balance of continued embrace of their existing culture while incorporating modifications of European culture.

Subsequent acculturation studies highlight acculturative stress, impacts of stress, and coping mechanisms taken by minority cultures (Berry, Evans, & Rawlinson, 1972; Born, 1970; De Vos, 1995; LaFromboise, Coleman, & Gerton, 1993; Mui & Kang, 2006; Schumann, 1986). Berry and Kim (1988) are given credit for connecting acculturation stress to mental health through evidence that the process of acculturation alters the mental health state of those living through the experience. Caplan (2007) developed somewhat of a taxonomy of common stressors experienced during the acculturation process. Stressors were divided into three unique dimensions, each containing sub-dimensions (Table 7).

A variety of instrumental and environmental stressors have been addressed within literature. Research has linked acculturation stress to various health related attributes, such as headaches associated with financial stress (Larson & McQuiston, 2008), increased alcohol

consumption as a coping mechanism (Barry & Kronk, 1993), and inability to express their environmental needs due to language barriers (Mainous, Diaz, & Geesey, 2008).

Social and interpersonal stressors include higher levels of depression and suicide ideation, particularly among first-generation immigrants (Hovey, 2000). Mui & Kang (2006) identified that family values also had a tendency to diminish due to acculturation stress, specifically leading to domestic violence. Those who reached out to family when facing acculturation stressors benefited from their support (Rivera, 2007). An additional complexity includes social support potentially acting as a stressor (Cespedes & Huey, 2008). If the younger generation (adolescents) attempt to provide social support (to parents), this often indicates a different strategy or type of acculturation. Intergenerational conflict brought about by acculturation stress leads to higher stress levels for all and a correlation of adolescents with depression (Cespedes & Huey, 2008).

Significant societal stressors include those experienced through migration. Migration stress tends to be compounded by factors within other dimensions, such as a language barrier, distinct culture, poverty, and ethnicity (Alegria et al., 2008). Finch and Vega (2003) found that discrimination is key factor impacting the amount of acculturation stress experienced. Immigrants who perceive experiencing discrimination during migration report higher levels of acculturation, a sense of not belonging, and have a tendency to separate from the dominant culture (Mena, Padilla, & Maldonado, 1987).

In general, reviewed literature associated with acculturation stress highlighted the need for culturally appropriate mental health supports specifically for those facing acculturation stressors. A number of studies have shown that acculturating to a dominant culture increases the

risk of alcohol consumption and drug use. Increased risk taking behavior is also documented as a common behavior reaction to increased stress (Fernandez-Pol et al., 1985; Larson & McQuiston, 2008). Social inequalities, gender relationship disparities, and immigration status make adolescent immigrants particularly vulnerable to psycho-social problems such as frequent drug use and reduced school attendance (Firestone et al., 1999; Surko et al., 2005).

Table 7

Dimensions of Acculturation Stress (Caplan, 2007)

	Dimensions		
	Instrumental/Environmental	**Social/Interpersonal**	**Societal**
Sub-dimensions	Financial	Loss of Social Networks	Discrimination/ Stigma
	Language Barriers	Loss of Social Status	Legal Status
	Lack of Health Care (access)	Family Conflict	Political/ Historical Forces
	Unsafe Neighborhoods	Intergenerational Conflicts	
	Unemployment	Changing Gender Roles	
	Lack of Education		

Acculturation Support for Students

Students from a minority culture, attending higher education institutions in a dominant culture are known to experience shock and stress in efforts to understand the organization, peers, and faculty expectations (Hayes 1998; Taylor, 2005; Ward, Bochner, and Furnham, 2001; Zhou et al., 2008). A majority of acculturation student support literature focuses on international

students, likely due to the large amounts (over a million/year) and accessibility of the population for research studies (Taylor, 2005).

Systematic research on international students' social and psychological problems began in the 1950s, from which stemmed a number of theoretical approaches to what is now considered acculturation stress (Ward, Bochner, and Furnham, 2001). Theoretical approaches include the following theories: social skills and cultural learning, expectations, grief and bereavement, locus of control, and social support (Argyle & Kendon, 1967; Bolwby, 1969; Feather, 1982; Rotter, 1966).

Many of these initial theoretical approaches attempted to address acculturation through a deficit lens. A common assumption held on struggling international students was a lack of the necessary skills to cope with cross-cultural contact (Bochner, 1986). More recent literature has shifted to focus on asset based approaches. For example, provision of interventions to offer preparation, orientation, and cultural skill acquisition training before entering the new culture (Bochner 1982; Klineberg, 1982). In other words, international students have the ability to handle acculturation stress with proper tools and training. Interventions were developed in response to evidence that international students can benefit from a greater amount of interaction with peers from the dominant culture (Abe, Talbot, & Geelhoed, 1998; Pruitt, 1978; Ward & Kennedy, 1993; Westwood & Barker, 1990; Zimmerman, 1995). Benefits include fewer academic issues, fewer social difficulties, and increased cultural communication skills.

Three contemporary theories evolved from the improved understanding of the value of intercultural interaction: Stress and Coping (Cuellar, Harris, & Jasso, 1980; Lazarus & Folkman, 1984), Culture Learning (Argyle, 1969), and Social Identification (Deaux, 1996) (Table 8). In the

stress and coping approach to cultural adjustment, adjustment itself is defined as, “an active process of managing stress at different systemic levels - both individual and situational.” (Zhou et al., 2008, p. 65), which would include interventions such as training on stress management.

Social identity theory evolved from social psychology as a means of better incorporating how an individual’s identity is impacted by their place in society (in-group/out-group, perceptions and interactions, etc) (Brown et al., 1992; Gudykunst & Hammer, 1988; Tajfel, 1981). It is through the social identity theory that Ward, Bochner, and Furnham (2001) developed their acculturation framework, positing that intercultural adaptation belongs in two categories, psychological and sociocultural (Searle & Ward, 1990; Ward, Bochner, & Furnham, 200). This model emphasizes that the most important objective to be successful during the acculturation process is the development of stress-coping strategies and culturally relevant social skills (Ward, Bochner, & Furnam, 2001; Zhou et al., 2008).

Table 8

Theories of Intercultural Contact

Theory	Theoretical Origin	Conceptual Framework	Theoretical Premise	Adjustment Factors	Intervention Guidelines
Stress and Coping (Affect)	Social psychology: stress, appraisal, and coping (Lazarus & Folkman, 1984)	Cross-cultural travelers need to develop coping strategies to deal with stress	Life changes are inherently stressful	Personal: life change, personality Situational: social support	Stress management skills development
Cultural Learning (Behavior)	Social and experimental psychology: social skills and interpersonal behaviour (Argyle, 1969)	Cross-cultural travelers need to learn culturally relevant social skills to survive and thrive in their new settings	Social interaction is a mutually organized and skilled performance	Culture-specific variables: new culture, communication competence, and cultural distance	Preparation, orientation, and cultural learning.

Social Identification (Cognition)	Ethnic, cross-cultural and social psychology: Self (Deaux, 1996)	Cross-cultural transition may involve changes in cultural identity	Identity is a fundamental issue for cross-cultural travelers	Cognitive variables such as: knowledge of the host culture, cultural similarity, and cultural identity	Enhancing self-esteem, emphasizing inter-group similarities

Acculturation Stress Conclusion

It is unknown at this time if undergraduate veterans experience acculturation stress during their transition from the military back to civilian life. Enhancements in understanding and services for international students can be attributed, in part, to a better understanding of acculturation and acculturation stress. Early models, using the term "culture shock" focused on addressing symptoms through medical interventions. Modern models of support for those going through the acculturation process empower the individual by identification as an active agent rather than a passive victim. Zhou et al. (2008) adapted a model to include pedagogical components and found developed interventions to be effective. There are potentially significant and broad implications associated with developing acculturation stress and undergraduate veterans. It is possible that future interventions would lead to comprehensive changes to the way undergraduate veterans are prepared to leave the military (and enter civilian society) as well as how faculty and staff might be trained to better support development of stress-coping strategies for veterans while enrolled in undergraduate programs.

Conclusion

The literature reviewed provides valuable insight for better understanding the experiences of veterans enrolled in undergraduate programs. These literature offer a window into the complexity of factors impacting veterans performance in higher education, which includes their

transition back into civilian society, how they perceive their civilian vocational identity, their sense of belonging in college, lasting impact of combat experiences, and societal perceptions and stereotypes. The acculturative career planning framework addresses veterans' evolving understanding of self (soldier to citizen), their roles in society, and societies' perceptions of their identity and value. Theories on career decision-making difficulty and self-efficacy fit within this framework. The taxonomy of career decision-making difficulty invites readers to consider veterans' additional identities (low-income, first-generation college students, non-traditional) and the potential impact these identities could have on career decision-making.

The goals of this study include broadening and deepening literature on student veterans. To broaden, the researcher focused on bringing in literature associated with other student populations with similar needs or issues. One example of this broadening is looking at acculturation and acculturation stress research performed mainly on international student populations. The intention of this study is to offer readers a better understanding of the undergraduate veteran experience while also building theoretical bridges to proven models of services and interventions for other marginalized student populations. Incorporation of descriptive statistics on veterans' outcome measures and applicable literature deepen discussions on veterans' lived experiences in higher education. The intention of this research is to encourage diversity, collaboration, and critical scholarship in this niche, emerging field.

Chapter 3: Methodology

Introduction

This chapter will describe the study's design, population and sampling recruitment, data collection and survey tool, analysis plan, and protection of human subjects.

Research Questions and Hypotheses

This quantitative study was carried out through testing two plausible hypotheses. Due to the quantitative methodology and complex nature of this study, sub-questions are included to address each of the factors associated with this study.

Research Question 1: To what extent do perceptions of civilian acculturation, vocational identity, sense of belonging, and satisfaction with practical education impact the college commitment of undergraduate veterans?

Sub Question (a): To what extent does vocational maturity impact undergraduate veterans' perception of and performance in college?

Sub Question (b): To what extent is college commitment of undergraduate veterans impacted by acculturation stress?

Sub Question (c): To what extent does undergraduate veterans' transitions into civilian society affect their perception of the value of higher education?

Sub Question (d): To what extent does undergraduate veterans' vocational maturity impact their satisfaction with higher education and commitment to college?

Sub Question (e): To what extent does undergraduates' sense of belonging impact their commitment to college?

The research questions are designed to test two plausible hypotheses:

1. Transitioning veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college.
2. Transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear.

Null Hypothesis 1: Transitioning veterans have difficulty adjusting to civilian life, but this does not include difficulty adjusting to college.

Hypothesis 1: Transitioning veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college.

Null Hypothesis 2: Transitioning veterans have difficulty in college, but not because they are unclear about their future civilian career, and do believe that college will assist them to become more clear.

Hypothesis 2: Transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear.

Research Design

The research design section provides a general overview of the research method selected, rationale for selecting this design, and additional study design details. Study design details include sampling, data collection, and data analysis.

The research questions and hypotheses were best addressed through a quantitative research study, using both multiple linear regression and path analysis. The research question was designed to identify the relationship between categorical independent variables and a

dependent variable. Multiple linear regression (MLR) models extended the ability of the researcher to find the degree to which multiple independent variables jointly explain a dependent variable. This study was interested in understanding the "best" description of relationships between the variables, thus linear modeling was required. MLR consists of a single, dependent variable and multiple, independent variables. MLR modeling offered the ability to answer two questions: what combination of variables best predicted an outcome? And which variables made the most difference?

Recent developments in linear modeling include two specialized methodologies: structural equation modeling (SEM) and hierarchical linear modeling (HLM). SEM models are beneficial for explaining relationships between measured variables and latent variables, and the relationships between latent variables (See Definition of Terms). Intelligence is a great example of a latent variable, IQ tests provide scores from multiple choice tests that estimate intelligence, which may be the underlying cause of many observable behaviors.

SEM was the appropriate model since, "there is an interest in estimating the total effect of a variable as it acts both directly and indirectly on the dependent variable" (Howard, McLaughlin, & Knight, 2012, p. 465). SEM included a combination of factor analysis (measurement model) and path analysis (structural model) (Kaplan, 2008; Coughlin, 2005). This study intended to apply path analysis. Path analysis, turbocharged multiple regression analysis, allowed more than one dependent variable to be considered, while also allowing variables to be both dependent and independent. Path analysis was beneficial for this study due to the number of variables being considered and the study's exploratory nature.

The 75-item survey was implemented to collect data for evaluations of the relationships between civilian acculturation, vocational identity, sense of belonging, satisfaction with practical education with college commitment. All variables were compared to general demographic data collected, which included gender, race, ethnicity, length of military service, age groups, and type of institution enrolled. Comparison analysis highlighted the needs of a unique sub-population within the undergraduate veteran population. Finally, while analysis performed did not reveal causation, the analysis results allowed the researcher to make inferences that may be pursued with additional studies through the statistical significance of relationships found.

Research Site

This research study gathered data via a confidential, online survey. The goal of this study was to gather perspectives of undergraduate veterans from a cross-section of 2-year and 4-year colleges and universities across the United States. Due to the nature of the survey, anonymous and confidential, the sites of participants are unknown.

Population

Inclusion Criteria

Undergraduate veterans sampled for this study met two important inclusion criteria: (a) stated identification as a military veteran, any discharge status; and (b) enrolled in a part-time or full-time undergraduate degree program. Undergraduate veterans were an ideal segment of the student veteran population due to their proximity to military service (compared to graduate student veterans), and likelihood of going through civilian career decision-making. Participants were located through formal organizations focused on serving student veterans; these included: Student Veterans of America and National Association of Veteran Program Administrators.

Participant recruitment will include social media posting and email distribution through professional listservs.

Exclusion Criteria

Due to the nature of this study (online survey), exclusion criteria were intentionally included in the survey design. Potential participants without military service were excluded from participating. Second, veterans enrolled in graduate programs were excluded from participating. Third, veterans who were not currently enrolled in an undergraduate program were excluded from participating.

During the survey design phase, sample criteria were integrated to ensure undergraduate veterans responses were captured, those who desired to participate but did not meet the qualifications were filtered out by survey logic. There were two demographic logic filters integrated into this survey. The first question asked was whether or not someone identifies as having served in the military. A negative response filters out potential participants. The second question asked about enrollment level in higher education, a response of non-enrollment or graduate level filters out potential participants.

Sample Recruitment

This study blended together convenience and purposive sampling. Purposive is defined as "selecting units based on specific purposes associated with answering the research study's questions" (Teddlie & Yu, 2007 p. 80). The purposive sampling technique category, complete collection (or criterion sampling) (Kuzel, 1992) emphasized the population of interest "who meet some special criterion" (Teddlie & Yu, 2007 p. 93). Participants were located through formal organizations focused on serving student veterans; these included: Student Veterans of America

and National Association of Veteran Program Administrators. It was estimated that these targeted organizations contained over 450,000 members (undergraduate and graduate), with an estimated 7,500 active undergraduate members. The researcher's target sample of 200 would result in a 5.76% margin for error and 90% confidence level. The main weakness in this sampling design was the lack of incentive for potential participants to complete the survey. Survey completion relied on veterans to strictly volunteer their time.

Data Collection

Data was collected online, to include participants' responses to a 75-item questionnaire and optional open-ended qualitative questions. The questionnaire included six demographic questions; five scales, each consisted of Likert-type questions scored from Strongly Disagree to Strongly Agree, and three open-ended questions (Appendix C). Qualtrics Survey Software (Qualtrics) were utilized to distribute the anonymous survey and collect responses. Qualtrics was selected as the preferred software due to the services and supports provided for survey development, distribution, collection, and analysis.

Qualtrics allowed for designing surveys into blocks of questions, which was beneficial for dividing out each scale into their own block which assists the analysis of survey results. Qualtrics also tracked participant progress and completion rates, which aided in estimating the amount of time required for completion and tracking of total participants.

Data Management

All data collected for this research project were collected and stored within Qualtrics, a secure survey platform. Participant identifiers, such as names, student ID, or email addresses

were not collected within the survey, thus are not stored. This mitigated the risk of compromising participants' identities.

Data collected via Qualtrics were only accessible to the primary researcher directly and indirectly to members of the researcher's dissertation committee. Data security protection includes two-factor authentication, including strong passwords, for access. Additionally, data collected were not shared in online data repositories. Data protection methods also included physical security of the computer, such as not taking the computer into public locations or using unsecure networks.

Data lifecycle management included data destruction, which was the process of removing information in a way that renders it unreadable (paper) or irretrievable (digital). The underlying sensitivity level of the data being destroyed was very low (no sensitive data collected) and the potential harm caused if this data was recovered was low too. The data destruction plan for this data includes deleting all electronic files. This follows the "Clear" category of data destruction. Data destruction timeline follows institutional policy, 3-years after study completion.

Protection of Human Subjects

Potential risks or discomforts to participants were mitigated, as much as possible, to protect human subjects. Mitigation of risk includes exclusion of questions or content related to significant personal experiences such as sexual or physical abuse, or other traumatic experiences. To protect participant's privacy, the survey did not ask for identifiable information (IP address, email address, birth date, college of enrollment). Participants are also informed that the study is voluntary and they have the right to withdraw at any time. To ensure that participants are aware

that participation is voluntary, recruitment materials contain content alerting potential participants to the voluntary nature of the study. The disclosure statement within the survey also specifies the voluntary nature of the study and informs that there is no penalty or ramifications for withdrawing from the study at any time. Finally, there is no deception used within this study, this allows participants to provide their perspectives without concerns about feeling deceived.

Instruments

Veteran-to-Civilian Acculturation Stress Inventory (V2CASI)

Military culture differs substantially from that of civilian culture in the following categories: values, organizational structure, language, communal living, clarity of purpose, and career progression. Veterans who return to civilian life often feel frustrated by their perception that civilians are selfish, lack overall purpose, and tend to be disorganized (Orazem et al., 2017). Veterans may also be surprised by civilians' perception that they are dangerous and robotic (Schreger & Kimble, 2017). As a result, veterans often report difficulty finding/holding jobs, maintaining social relationships with family and friends, and feeling like they belong in civilian society (Derefinko et al. 2019; Yanchus et al., 2018). Currently, there is no widely used measure of veterans' acculturation stress. However, the researcher's literature review uncovered measures of analogous acculturation stress among immigrant populations (Benet-Martinez, 2003; Corona et al., 2017; de Shiverdecker, 2018; Miller, Kim, & Benet-Martinez, 2011; Ramdhonee & Bhowon, 2012; Tan, 2021; Wei et al., 2016). This study therefore used a 19-item scale based on Riverside Acculturation Stress Inventory (RASI) (Benet-Martinez and Haritatos, 2005), for which selected items have been slightly revised to capture veterans' cultural experience.

College Commitment Scale

Davidson, Beck, & Milligan (2009) found that college student retention could be predicted by a multidimensional College Persistence Questionnaire (CPQ); unfortunately, their scale is too long to be used here. Therefore, the researcher created a 13-item College Commitment Scale; it consists of items derived from two subscales of the CPQ that best predicted college retention: academic conscientiousness and institutional commitment (Davidson & Beck, 2019; Gore, 2010; Grant-Vallone et al., 2003; Hackman & Dysinger, 1970; Marks, 1967; Sexton, 1965; Slanger et al., 2015; Sharma & Yukhymenko-Lescroart, 2018).

College Belongingness Scale

Previous research indicates that students are more likely to persist within postsecondary programs if they perceive they belong within the program and at the institution (Dweck, 2014; Good, Rattan, & Dweck, 2012; Juvonen, 2006; Silva & White, 2013; Walton & Cohen, 2011, Willms, 2003; Yeager & Walton, 2011; Yeager et al., 2016; Yorke, 2016). Undergraduate veterans are non-traditional students with a significant break in formal education. In addition, they may feel stigmatized due to their military experience. Therefore, many veterans may feel that they do not belong in their program of study, or at their institution. The study used the 6-item College Belongingness scale (Yorke, 2016) and additional items from the Revised Sense of Belonging Scale (Hoffman, Richmond, Morrow, & Salomone, 2002).

Vocational Identity Measure

Vocational identity is the sense people have of their work-related interests, talents, and values - and their belief that these may be realized in a specific career. Vocational identity has been found to predict college retention and completion (Felt et al., 2021; Gupta, Chong, &

Leong, 2015; Hirschi, 2011; Hirschi, Jaensch, & Herrmann, 2017; Holland, Johnston, & Asama, 1993; Leong & Morris, 1989; Luke, Redekop, & Rugin, 2015; Perez, Cromley, & Kaplan, 2014; Savickas, 1985; Skorikov & Vondracek, 1998). There are reasons to believe that veterans may score low on vocational identity. Veterans receive significant and specific training for their military occupations during military service, yet many of these jobs do not translate directly to civilian occupations. Veterans are therefore likely to feel vocationally adrift; this in turn could contribute to their doubt about whether college is preparing them for any foreseeable civilian career. This study used the 20-item Vocational Identity Measure developed by Gupta, Chong, & Leong (2015).

Practical Education Satisfaction

Even if veterans have a strong vocational identity, they may feel little commitment to college if they doubt whether it is providing them with the vocational skills and credentials they need. To the researcher's knowledge, there is currently no measure of how students assess the vocational utility of their education. Therefore, this study used a scale the researcher created called, The Practical Education Satisfaction scale. The scale has been pilot tested and found to have high inter-item consistency (Cronbach's alpha = .863) and to strongly correlate with Commitment to College (r = .771).

Open-ended Questions

Open-ended questions allow respondents to describe their experience transitioning back into civilian society and in college. Their responses were coded for themes and thorough checks were used to ensure participants remain anonymous. This included removal of descriptors that might otherwise compromise their identity. These questions are:

1. How would you describe differences between military and civilian culture?
2. Veterans sometimes feel misunderstood when returning to civilian society. Have you had any experiences like that? What happened, how did you deal with the situation?
3. Veterans sometimes wonder whether college really prepares them for a career. Do you agree or disagree with this statement? Why?

The researcher chose a quantitative survey based on the research question, purpose of the study, and lengthy fieldwork prior to the survey. A quantitative survey supports the investigation of the primary hypotheses driving this research study: transitioning veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college; and transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear. The quantitative survey, Veteran-2-Civilian Acculturation Stress Inventory (V2CASI), came out of prior fieldwork that informed the content and guiding theories. Prior fieldwork took place in the pilot study phase; which took place over the course of a sixteen-week period of time. The pilot study phase included survey development, survey planning, survey administration, and survey analysis.

Pilot Study

The pilot phase of this study was conducted in the greater Boston area; due to researcher access and the density of undergraduate institutions enrolling large numbers of undergraduate veterans. Direct and indirect recruitment was performed through email and social media outlets focused on the potentially qualified participants. The purpose of the pilot phase was to:

- To develop and validate instruments for measuring key variables identified by the literature review.

- To pilot test the data collection instruments.
- To use feedback to inform the data collection phase of the study.

The pilot study phase included measuring the connections between four scales chosen based on related studies results: career maturity, educational satisfaction, college commitment, and academic effort. This quantitative questionnaire was taken by twenty-three participants in various schools in New England. The results of the pilot study found that College Commitment (CC) had a high correlation ($r = .771$) with Educational Satisfaction (ES). ES is measuring the belief that the courses-taken are vocationally-relevant, it does not measure satisfaction with liberal arts courses.

The pilot study also revealed the need to understand the level of difficulty veterans experience when transitioning back into society. A noticeable gap in the literature and valid survey instruments address acculturation stress and college success became evident through thematic coding of interview responses. From this discovery, the Veteran-2-Civilian Acculturation Stress Inventory (V2CASI) was developed through a process of working with a team of researchers at the Edith Nourse Rogers Memorial Veterans Hospital (Bedford VAMC). Bedford VAMC's mission is to facilitate research and educational activities involving veterans. A team of clinicians and peer support specialists (veterans) reviewed and scored a developed scale of questions addressing perceived acculturation stress of veterans. Combining V2CASI with the four scales in the pilot study will provide a better understanding of how acculturation impacts the veterans' experiences in college.

Research Phase

The research phase was to administer the questionnaire that was developed and validated during the pilot phase. The V2CASI scale was added to the questionnaire used in the pilot phase to measure veterans acculturation stress. This phase was conducted with qualifying veterans across the country.

Data Analysis

To examine the two hypotheses driving this research study: 1.) transitioning veterans have difficulty adjusting to civilian life in general, which includes difficulty adjusting to college; and 2.) transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear. Several data analyses were conducted to determine the results of this study. Descriptive statistics and calculation of reliability coefficients were conducted using IBM SPSS Statistics (Version 26) and Jamovi (Version 1.6), both statistical analysis software. Jamovi is an open-source statistical software platform. Subsequently, multiple regression analyses were performed to assess the relationship among a set of independent variables and dependent variables, providing a better understanding about the relationships between predictive variables. Similarly path analysis, a multiple regression model, was performed to investigate the magnitude and significance of the hypothesized causal connections between a set of variables.

Information & Data Utilized

Information needed for this study includes demographic and survey data. Both demographic and quantitative data are collected from participants within the survey. Demographic data are useful for pattern analysis for factors such as age, military branch of

service, and gender. Survey participants provided first-person perspectives of their transition out of the military, adjustment to civilian society, experiences in higher education, and participation in career planning processes.

Survey data was needed to measure dependent and independent variables. Participants responded to online surveys, providing data about their experience readjusting to civilian society, career planning they have performed, and how they feel about their experiences in college.

Trustworthiness

To ensure trustworthiness of research findings, the researcher implemented strategies recommended by Glesne (2010), to include peer review, statement of researcher bias, and triangulation. Peer review ensures external reflection and validation of research data through the review by other researchers. This group of experienced researchers provided external feedback to the researcher to mitigate bias and erroneous findings.

Stating bias upfront allows the researcher to reflect upon their own subjective view (Glesne, 2010). Reflection on subjectivity prior to performing analysis allowed the researcher to develop strategies to mitigate the impact of bias. For example, the researcher believes that a majority of undergraduate veterans finance college enrollment through the Post-9/11 G.I. Bill, which provides additional external incentives and pressures than other federal financing. For example, this version of the G.I. Bill incentivizes students, through a housing stipend, to enroll in twelve-credits or more.

Triangulation is an analysis method that combines qualitative and quantitative data. The integration of both types of data improves analysis and illustrates a more complete understanding of the phenomenon being studied (Shavelson & Towne, 2002). This study intentionally collected

open-ended qualitative comments in order to further demonstrate the results of the quantitative analysis.

Chapter 4: Results

Demographic Information

Demographic information collected from 170 participants using an anonymous, secure online questionnaire offers some contextual information about the participants (see Appendix B). Descriptive statistics indicated that a majority of survey participants identify as male (77.7%), which is representative of the military demographic distribution. Over two-thirds of the sample's race are White (71.2%), nearly half (48.2%) of participants served 4-7 years in the military, and over half are enrolled at public, 4-year institutions (57.1%). Additional demographic information is described in the chart below in Table 9.

Table 9

Demographic Information

Category	Demographic Item	Participants	
		N	%
Gender	Female	37	21.7
	Male	132	77.7
	Non-binary	1	.6
Race	American Indian/Alaskan Native	0	0.0
	Asian	14	8.2
	Black/African American	23	13.5
	Native Hawaiian/Other Pacific Islander	1	0.7
	White	121	71.2
	Other	11	6.5
Ethnicity	Hispanic or Latino	18	10.7
	Not Hispanic or Latino	150	89.3
Military Branch	Air Force	13	8.6

	Army	78	51.3
	Coast Guard	0	0.0
	Marine Corps	17	11.2
	Navy	30	19.7
	National Guard	14	9.2
Length of Service	Less than 1 Year	0	0.0
	1 - 4 Years	55	32.4
	4 - 7 Years	82	48.2
	7-10 Years	14	8.2
	10 - 15 Years	5	2.9
	15+ Years	13	7.7
	Other	1	.6
Level of Education	Certificate	1	0.6
	Associate's	59	34.7
	Bachelor's	106	62.4
	Other Undergraduate Level	4	2.3
Type of Institution	Public 4-year	97	57.1
	Public 2-year	58	34.1
	Private 4-year	12	7.0
	Private 2-year	0	0.0
	Other	0	0.0
	For-profit	3	1.8
Total		170	100

Preliminary Analysis

Prior to in-depth analysis, preliminary analysis was performed in order to ensure quality. First, interrelated reliability analysis of all five scales (Appendix F) results supported the use and

quality of these scales. Also participants who were missing at least 20% of response data were excluded prior to analysis, which accounted for 11.3% of total responses. Also, responses from participants who reported pursuit of graduate degrees, which accounted for 18.2%, were removed. Second, inferential statistical analysis was completed to test the research questions, using a criterion alpha level of .05 to determine statistical significance. Pearson correlations for the study variables are provided in Table 10.

The correlation matrix is a diagnostic first step in structural equation models and linear regression. Table 10 results indicate that 10 out of 11 correlations are statistically significant, 3 linear relationships are strong (0.60 - 0.80), and 2 are moderate (0.40 - 0.60). Results indicate relationships between factors that relate to veterans difficulty adjusting to college, including practical education satisfaction and college commitment.

Statistical Analysis

H_1: Veterans' commitment to college is affected by their sense of college belonging, and perhaps more largely, their discomfort with civilian society.

To test hypothesis 1, multiple regression analyses examine the perceptions of survey respondents, the results are included in Tables 11 - 11.5. Table 11 supports the assumption that veterans' sense of belonging affects their college commitment ($R^2 = .314$). Table 11.1 supports the assumption that veterans who are having difficulty adjusting to civilian life are also more likely to have difficulty adjusting to college ($R^2 = .192$). College Belongingness is better predicted by two independent variables, Acculturation Stress and Practical Education Satisfaction. Results show a significant effect on belongingness ($F(2,1) = 56.8$, $\rho<.001$), with an R^2 of .574, suggesting that 57.4% of the variation is predicted by the listed factors. Participants'

predicted that college belongingness is equal to 27.907 - (-.123) (Acculturation Stress) + .538 (Practical Education Satisfaction). Surprisingly, acculturation stress was not found to be a predictor of college commitment, the findings were not statistically significant ($p > .05$). Since acculturation stress is a significant predictor of belongingness, and belongingness is a significant predictor of college commitment, the null hypothesis is rejected and the hypothesis is retained.

Since the veteran population is absent in literature associated with acculturation stress, and the scale used here was developed specifically for the study, additional multiple regression analysis were conducted to provide readers and future researchers with another approach to understanding the results (See Tables 11.3 and 11.4). Analysis could be complementary or provide an alternative understanding of the results. Tables 11.3 and 11.4 support the assumption that veterans are less satisfied with their college education in part due to cultural stress experienced, as well as how committed they were to completing a degree, practical education satisfaction can be predicted by two presented factors, Acculturation Stress and College Commitment. Results show a significant effect on practical education satisfaction ($F(3,1) = 41.411$, $p<.001$), with an R^2 of .516, suggesting that 51.6% of the variation is predicted by the listed factors. Participants predicted practical education satisfaction equal to 25.653 - (-.207) (Acculturation Stress) + .498 (College Commitment). Further discussion of findings is performed in Chapter 5.

Due to unexpected results associated with acculturation stress, additional analysis focused on better understanding our sample and looking for explanations of what initially seemed to be conflicting results. The response sample was divided into four quadrants, based on whether individual responses scored above or below the mean on the Veteran-to-Civilian

Acculturation Stress Scale and the College Commitment Scale (See Tables 12.2 - 12.4). Further examination investigated differences between each of the quadrants: above average in college commitment, above average in acculturation stress (Committed and Stressed); above average in college commitment, below average in acculturation stress (Committed and Not Stressed); below average in college commitment, above average in acculturation stress (Not Committed and Stressed); and below average in college commitment, below average in acculturation stress (Not Committed and Not Stressed). The Committed and Stressed Quadrant scored highest in Vocational Identity and College Belongingness and is disproportionately made up of those enrolled in 4-year institutions. The Not Committed and Stressed Quadrant scored lowest in Vocational Identity and College Belongingness as is disproportionately made up of those enrolled in 2-year institutions. The Committed and Stressed quadrant, 34 % of all respondents, scored in the middle for both Vocational Identity and College Belonging (See Table 12.4). The amount of individuals expressing both higher levels of commitment and stress was unexpected and will be discussed further within the discussion of findings in Chapter 5.

Table 10

Correlation Matrix of Study Scales

Correlation Matrix

		Practical Education Satisfaction	College Belongingness	Vocational Identity Measure	Acculturation Stress Inventory	College Commitment
Practical Education Satisfaction	Pearson's r	—				
	p-value	—				
College Belongingness	Pearson's r	0.729	—			
	p-value	<.001	—			
Vocational Identity Measure	Pearson's r	0.365	0.395	—		
	p-value	<.001	<.001	—		
Acculturation Stress Inventory	Pearson's r	-0.372	-0.438	-0.337	—	
	p-value	<.001	<.001	<.001	—	
College Commitment	Pearson's r	0.643	0.561	0.322	-0.086	—
	p-value	<.001	<.001	<.001	0.276	—

Table 11

Linear Regression: College Belongingness and College Commitment

Model Fit Measures

Model	R	R^2
1	0.561	0.314

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	21.172	4.0113	5.28	<.001	
College Belongingness	0.850	0.0993	8.56	<.001	0.561

Table 11.1

Linear Regression: College Belongingness and Acculturation Stress

Model Fit Measures

Model	R	R^2
1	0.438	0.192

Model Coefficients - College Belongingness

Predictor	Estimate	SE	t	p
Intercept	56.968	2.8179	20.22	<.001
Acculturation Stress Inventory	-0.241	0.0392	-6.15	<.001

Table 11.2

Linear Regression: College Commitment and Acculturation Stress

Model Fit Measures

Model	R	R^2
1	0.0864	0.00747

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	59.9622	4.5996	13.04	<.001	
Acculturation Stress Inventory	-0.0702	0.0642	-1.09	0.276	-0.0864

Table 11.3

Linear Regression: College Belongingness, Practical Education Satisfaction, and Acculturation Stress

Model Fit Measures

Model	R	R^2
1	0.758	0.574

Model Coefficients - College Belongingness

Predictor	Estimate	SE	t	p
Intercept	27.907	3.3181	8.41	<.001
Practical Education Satisfaction	0.538	0.0464	11.61	<.001
Acculturation Stress Inventory	-0.123	0.0315	-3.90	<.001

Table 11.4

Linear Regression: Practical Education Satisfaction and Acculturation Stress

Model Fit Measures

Model	R	R^2
1	0.372	0.138

Model Coefficients - Practical Education Satisfaction

Predictor	Estimate	SE	t	p
Intercept	55.934	3.5488	15.76	<.001
Acculturation Stress Inventory	-0.249	0.0498	-5.00	<.001

Table 11.5

Linear Regression: Practical Education Satisfaction, College Commitment, and Acculturation Stress

Model Fit Measures

Model	R	R^2
1	0.719	0.516

Model Coefficients - Practical Education Satisfaction

Predictor	Estimate	SE	t	p
Intercept	25.653	3.8172	6.72	<.001
College Commitment	0.498	0.0453	11.00	<.001
Acculturation Stress Inventory	-0.207	0.0375	-5.51	<.001

Table 11.6

Linear Regression: College Commitment and Practical Education Satisfaction

Model Fit Measures

Model	R	R^2
1	0.643	0.414

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p
Intercept	24.333	2.9465	8.26	<.001
Practical Education Satisfaction	0.793	0.0746	10.63	<.001

Table 12

Linear Regression: College Commitment, Bachelor's Degree

Model Fit Measures

Model	R	R^2
1	0.696	0.484

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p
Intercept	-0.2162	7.6373	-0.0283	0.977
Acculturation Stress Inventory	0.1987	0.0566	3.5099	<.001
College Belongingness	0.3740	0.1466	2.5505	0.012
Vocational Identity Measure	0.0680	0.0512	1.3281	0.187
Practical Education Satisfaction	0.5733	0.1183	4.8462	<.001

Table 12.1

Linear Regression: College Commitment, Associate's Degree

Model Fit Measures

Model	R	R^2
1	0.714	0.510

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p
Intercept	-1.198	20.351	-0.0589	0.953
Practical Education Satisfaction	0.854	0.218	3.9253	<.001
College Belongingness	0.118	0.288	0.4087	0.685
Vocational Identity Measure	0.130	0.105	1.2351	0.223
Acculturation Stress Inventory	0.148	0.191	0.7743	0.442

Table 12.2

T-Test Variables and Group Statistics by Education Level

Independent Samples T-Test

		Statistic	df	p		Effect Size
College Commitment	Student's t	-2.28 [a]	162	0.024	Cohen's d	-0.373
Practical Education Satisfaction	Student's t	-3.67	161	<.001	Cohen's d	-0.601
Vocational Identity Measure	Student's t	-3.21	158	0.002	Cohen's d	-0.528
College Belongingness	Student's t	-2.75	159	0.007	Cohen's d	-0.449
Acculturation Stress Inventory	Student's t	3.69 [a]	158	<.001	Cohen's d	0.607

[a] Levene's test is significant ($p < .05$), suggesting a violation of the assumption of equal variances

Group Descriptives

	Group	N	Mean	Median	SD	SE
College Commitment	Associates	58	53.0	56.0	10.82	1.421
	Bachelors	106	56.5	60.0	8.42	0.818
Practical Education Satisfaction	Associates	58	35.8	35.5	7.68	1.009
	Bachelors	105	40.4	41.0	7.58	0.740
Vocational Identity Measure	Associates	58	64.1	66.0	13.48	1.770
	Bachelors	102	71.1	72.0	13.37	1.324
College Belongingness	Associates	59	38.2	39.0	6.10	0.794
	Bachelors	102	40.9	41.0	6.18	0.612
Acculturation Stress Inventory	Associates	58	75.2	76.0	7.34	0.964
	Bachelors	102	68.4	72.0	12.91	1.278

Table 12.3

One-Way ANOVA Quadrant Analysis

One-Way ANOVA (Welch's)

	F	df1	df2	p
Vocational Identity Measure	9.42	3	69.5	<.001
College Belongingness	36.13	3	70.0	<.001
Practical Education Satisfaction	51.82	3	71.9	<.001

Group Descriptives

	Quadrants	N	Mean	SD	SE
Vocational Identity Measure	Committed / Not Stressed	44	76.1	11.90	1.794
	Not Committed / Not Stressed	25	68.2	17.55	3.511
	Not Committed / Stressed	35	61.0	13.43	2.270
	Committed / Stressed	54	67.9	11.25	1.530
College Belongingness	Committed / Not Stressed	44	45.0	5.40	0.814
	Not Committed / Not Stressed	26	38.1	6.53	1.281
	Not Committed / Stressed	36	33.6	4.60	0.767
	Committed / Stressed	54	40.7	3.61	0.492
Practical Education Satisfaction	Committed / Not Stressed	44	44.4	4.64	0.700
	Not Committed / Not Stressed	27	35.4	8.57	1.649
	Not Committed / Stressed	34	30.4	5.28	0.906
	Committed / Stressed	52	40.4	5.33	0.739

Table 12.4

Independent Samples, Contingency Table of Quadrants

Contingency Tables

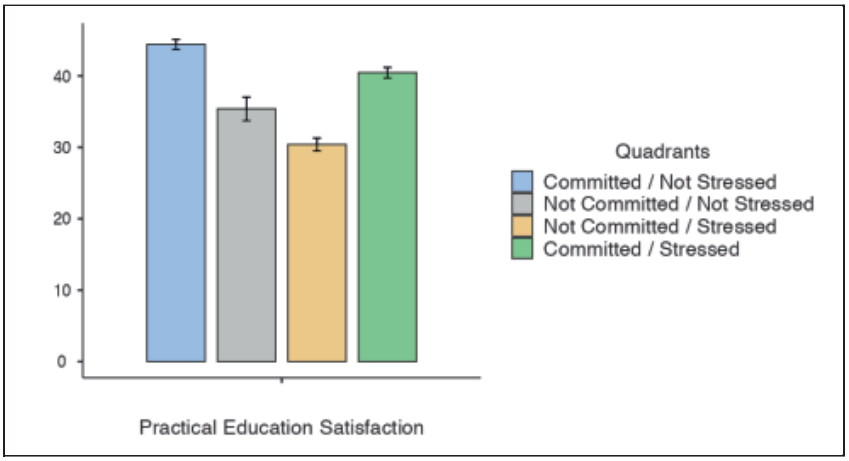
Q8		Quadrants				Total
		Committed / Not Stressed	Not Committed / Not Stressed	Not Committed / Stressed	Committed / Stressed	
Associates	Observed	8	6	21	22	57
	% within row	14.0%	10.5%	36.8%	38.6%	100.0 %
Bachelors	Observed	36	20	14	32	102
	% within row	35.3%	19.6%	13.7%	31.4%	100.0 %
Total	Observed	44	26	35	54	159
	% within row	27.7%	16.4%	22.0%	34.0%	100.0 %

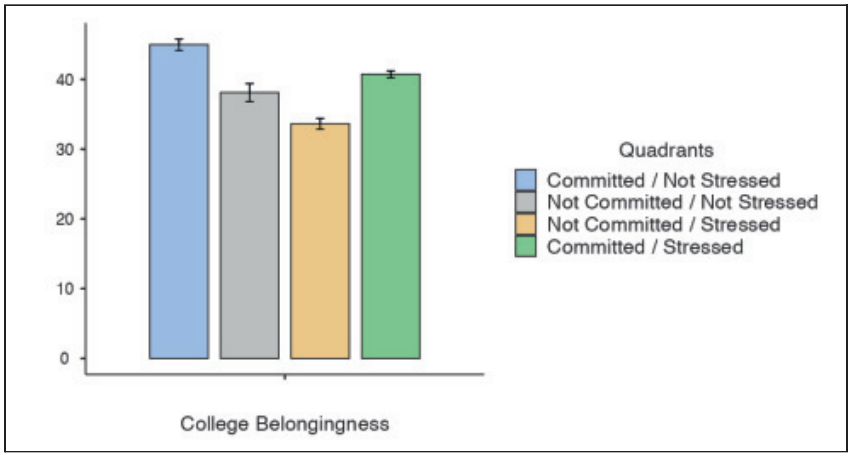
χ^2 Tests

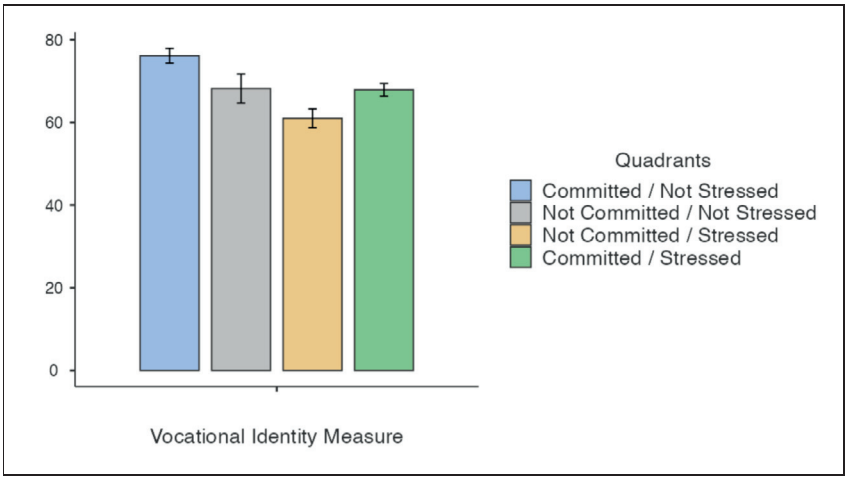
	Value	df	p
χ^2	17.3	3	<.001
N	159		

Graph 1

Quadrant Responses by Variables







Results H_1

Research focused on addressing H_1 found that acculturation stress and practical education satisfaction have significant correlations with belongingness (See Tables 11, 11.1). This being a non-longitudinal study, sense of belonging is a proxy measure for student retention (Barker, Hovey, & Thompson, 2014; Bensen, 2019; Strayhorn, 2009; and Torres & Hernandez, 2009). The results indicate that undergraduate veterans expressing higher levels of acculturation stress express lower levels of belongingness at their institution (R= .438). The results also indicate the veterans reporting higher levels of practical satisfaction with their program also report high levels of belongingness at their respective institution.

Additional regression analysis indicated that practical education satisfaction correlates with college commitment (R^2=.414) (See Table 11.6). Veterans with higher satisfaction in the practical application of their programs are more likely to be committed to college. Also, acculturation stress correlates with practical education satisfaction (R^2=.138) (See Table 11.4). This result indicates that veterans with lower levels of acculturation stress are more likely to be satisfied with the practical application of their academic programs. Discussion of these results can be found in Chapter 5.

H_2: Transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear.

The hypothesis predicted that veterans would be more committed to college if they were clear on what they wanted to do for a civilian career, and even more so if they perceived their degree programs were preparing them for their future career. To test hypothesis 2, regression analysis, within a path model, examines casual patterns among the set of variables (Figure 6). The logic of path analysis includes the following variable statements: practical education satisfaction has a direct effect on college commitment; vocational identity has a direct effect on practical education satisfaction; and vocational identity has an indirect effect on college commitment, via practical education satisfaction, and direct effect on college commitment. A series of regressions analyzes influences on the dependent variable within the model. Table 13 expresses correlations among the variables, Table 13.1 expresses linear regression analysis results, and Table 13.2 provides details on path analysis. Figure 7 expresses the results of path analysis, (.087)= (.322) - ((.365)*(.643)). Additional discussion of findings is found in Chapter 5.

Table 13

Correlation Matrix of VIM, CC, and PES

Correlation Matrix

		Vocational Identity Measure	Practical Education Satisfaction	College Commitment
Vocational Identity Measure	Pearson's r	—	0.365	
	p-value	—	<.001	
Practical Education Satisfaction	Pearson's r	0.365	—	
	p-value	<.001	—	
College Commitment	Pearson's r	0.322	0.643	—
	p-value	<.001	<.001	—

Table 13.1

Path Model Regression Analysis

Model Coefficients - Practical Education Satisfaction

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	24.356	2.9333	8.30	<.001	
Vocational Identity Measure	0.203	0.0417	4.88	<.001	0.365

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	40.204	3.5906	11.20	<.001	
Vocational Identity Measure	0.219	0.0512	4.28	<.001	0.322

Model Coefficients - College Commitment

Predictor	Estimate	SE	t	p	Stand. Estimate
Intercept	24.333	2.9465	8.26	<.001	
Practical Education Satisfaction	0.793	0.0746	10.63	<.001	0.643

Figure 6

Path Model

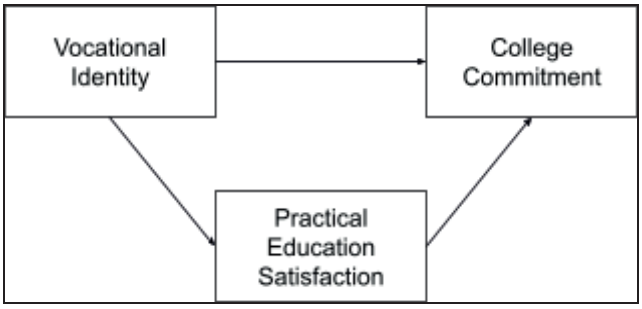


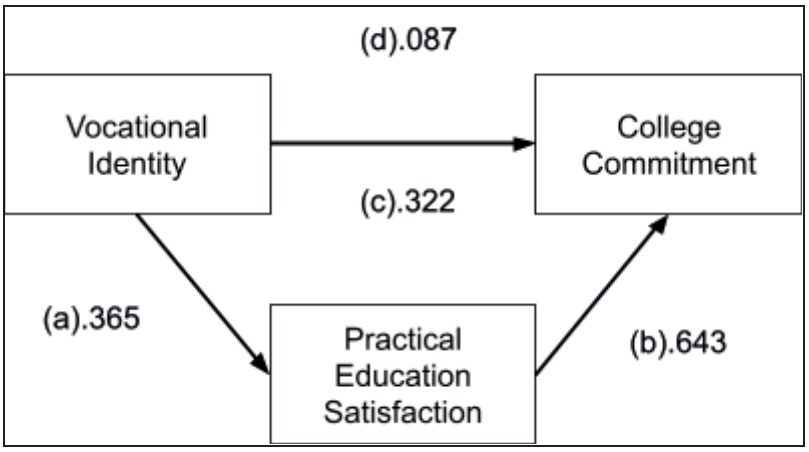
Table 13.2

Path Model Statements, Analysis, and Results

Statement	Analysis	Results
Students are committed to college if they think it provides them with vocationally-relevant skills and credentials.	(1)Regression Dependent: College Commitment Scale Predictor: Practical Education Satisfaction Statistic: Standardized Coefficient (a)	True: R=.643
Students are more likely to think college is providing those skills and credentials if they know what they want to do for a career.	(1)Regression Dependent: Practical Education Satisfaction Predictor: Vocational Identity Measure Statistic: Standardized Coefficient (b)	True: R=.365
Students are committed to college if they know what they want to do for a career, even if they do not really believe that college is providing the necessary skills and credentials.	(1)Regression Dependent: College Commitment Scale Predictor: Vocational Identity Measure Statistic: Standardized Coefficient (c) (2) Unmediated path weight (d) (d)=(c) - (a)*(b)	Further Analysis Required

Figure 7

Path Model Analysis Results



Results H_2

It was predicted that undergraduate veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear. Path modeled analysis provides evidence that Practical Education Satisfaction has a strong effect on College Commitment. Thus if veterans believe that their undergraduate programs are preparing them for a future civilian career, they will be more committed to completing their program. Vocational Identity has an effect on the relationship between Practical Education Satisfaction, but the effect size is rather small. Path modeled analysis results express partial correlation (Figure 7). Further discussion of the results can be found in Chapter 5.

Open-ended Responses

Open-ended questions allowed respondents to describe their experience transitioning back into civilian society and in college. Thirty-two participants responded to at least one of the

optional open-ended questions, and some of these participants responded to each of the open-ended questions. Responses were reviewed and edited to ensure confidentiality and anonymity of respondents were protected. Due to the quantitative nature of this study, thematic analysis was performed on a sampling of open-ended responses for the following questions:

1. How would you describe differences between military and civilian culture?
2. Veterans sometimes feel misunderstood when returning to civilian society. Have you had any experiences like that? What happened, how did you deal with the situation?
3. Veterans sometimes wonder whether college really prepares them for a career. Do you agree or disagree with this statement? Why?

Responses offer the reader a deeper understanding of veterans' perceptions of military and civilian cultural differences, acculturative stress experiences, connections between college and career preparedness, and general thoughts. Each of these themes reinforce the two hypotheses of this study, and bolster quantitative survey analysis results.

Cultural Value Differences

Veterans expounded upon differences between military and civilian culture. Their perspectives may improve readers' understanding of military culture and the lens of veterans. Cultural differences expressed within statements are categorized by subthemes below. Participants expressed displeasure for what they believed to be civilian inefficiency. Through their eyes, they found civilian society to be disorganized and focused on trivial things; in contrast, military society was highly organized and focused on important things.

- *"Civilians are lazy and constantly complain about unimportant things."*
- *"The military was clear and organized. Civilian life is messy."*

Respondents lauded certain aspects of military culture for prioritizing teamwork and interconnectedness.

- *"Military culture means embracing life together. In the civilian world each person is on their own."*
- *"Military culture is centered around relationships and mentoring. Military training and operations are performed together as units. People spend a lot of time together and grow to become family. Civilian culture is very different, most people don't know each other, and tend to only look out for themselves."*

In contrast, veterans were critical of civilian priorities, which they expressed as misguided and disconnected from deep-rooted values.

- *"Civilians don't have the sense of purpose, mission (tasks) accomplishment that most military members have. Most civilians I've run into are way way way more selfish!!"*
- *"The military has clear values that are strongly enforced. Civilian society has laws, but lacks clear values."*

Veterans also expressed moral disdain for civilians who are too lazy and overly sensitive.

- *"Civilian culture is disorganized and fake. Military culture is purposeful and structured."*
- *"Civilians tend to think that life is hard and every little task is too much to handle."*
- *"The civilian culture is extremely too sensitive."*
- *"Civilians are lazy and constantly complain about unimportant things."*

Veterans pulpit moral criticism for the societal construct of individualism. As they re-enter society, it is common for veterans to vocalize their displeasure for this aspect of civilian society, starkly contrasted with the collaborative culture they experienced during military service. A

common military phrase, “got your six” meaning “I’ve got your back,” is used to express the military value of collaboration and communal support. This phrase instills confidence that someone is always looking out for your best interest because it will strengthen the community as a whole. In contrast, the civilian world tends to be dog eat dog, or the devil takes the hindmost.

- *“In the military, my team succeeded and failed together. We were only as strong as our weakest link. The strong supported the weak. Civilian society seems to take advantage of the weak at every turn.”*
- *“Military gives you a solid path to follow for advancement, and those around you will help. Civilians expect you to know the path and how to get on it, stay on it, and figure out all of your faults and you are on your own to solve everything with no help at all.”*
- *“Military culture is centered around relationships and mentoring. Military training and operations are performed together as units. People spend alot of time together and grow to become family. Civilian culture is very different, most people don't know each other, and tend to only look out for themselves.”*
- *“As a civilian I am on my own, there is nobody to watch my back and no clear way to find help. The civilian institutions like the VA are filled with people who mean well but don't understand the people they are supposed to help.”*
- *“The military is so structured and everyone has the utmost respect for everyone around them. You are a closely knit family in the military which makes team work important and you even have a good relationship with your Marine's family. You spend a lot of your time with Marines, even when you are not working. In the civilian culture it's quite the opposite, everyone's for themselves and have no regard for your success. They are quick*

to throw you under the bus if an issue arises. Civilian employees will hoard knowledge and information which will prevent you from getting better at your job. Also will ensure that they get all the credit for something that improved the workplace."

Acculturative Stress: Stereotyping/Stigma and Self-Identity

Veterans did provide examples of acculturative stress within sub-dimensions of discrimination stigma, loss of social status, language barriers, political, and legal status. Veterans expressed that they have experienced being negatively stereotyped by civilians. These stereotypes include the perception that those who serve in the military are of lower intelligence and all have the same political affiliations.

- *"I was told by Ivy League faculty and students that they were amazed at my intelligence because they thought only people with no other prospects served in the military. That happened on five or six separate occasions."*
- *"Liberal students apologized to me for originally stereotyping me as a racist alt right veteran when they took the time they learned I am open minded and I value diversity because of the diverse type of people I worked with in the military."*

Respondents also believe that civilians stereotype veterans due to their lack of cultural awareness and low comprehension of military service. This offers an opportunity for colleges and universities to intervene through research and education of their own staff/faculty/students. Inclusion of veterans within mandatory stereotype training would help address issues faced by veterans within these statements:

- *"Many times as a veteran you are welcomed warmly, however, there are often times you are met with pure hate when it is discovered you are a veteran. I think many civilians*

think every member of the military is a stereotypical frontline infantryman who is a crazy war criminal, when that is not the reality. Civilians are drastically uneducated when it comes to the functions of the military, and often are hated just for the idea of supporting the government."

- *"Of course once everyone finds out that I am a Marine they want to talk about war and "how many people I have killed". They think that they know what goes on in the military based off of the movies that they see."*
- *"People seem to have an idea of what veterans are like based on movies or news stories."*

Veterans express their need to conform to societal norms in effort to be accepted back to society, which includes learning and adopting civilian behavior, language, and other traits. This fits within the social/interpersonal dimension of acculturation stress, veterans are changing their behavior in part to avoid conflict.

- *"Yes, I tried to conform to their type of behavior."*
- *"I had to learn to communicate differently, the military has its own language so I had to relearn how to talk as a civilian. I stopped swearing as much as I used to."*
- *"I conformed. I kept the things that worked and canned the things that didn't. If it didn't directly benefit me, I tossed it aside."*
- *"Some people are very uncomfortable with direct communication. I have learned that I have to be less direct, otherwise I'm seen as being too aggressive."*

Veterans experience identity confusion when re-entering civilian society. To address their loss of identity, individual strategies include seeking support: from others, through faith, and through education respectively.

- *"Joining the military at 18 and exiting at 24, I had a massive identity crisis. My cultural identity was wrapped up in being a soldier. That made it very difficult to connect with anyone who wasn't military. What helped me in my transition and figuring out who I was outside of the uniform was my christian faith. I feel that embracing my spiritual identity, which I had already done in the military, gave me something to hold onto when I wasn't understood by civilians."*
- *"I did not know what to do or how to define myself when I got out. I was lucky enough to have a great support system that helped me through this rough time."*
- *"Yes. I spent a few years job hopping until finally deciding to pursue a BA in psychology in order to better understand myself and others, and to research these same issues veterans are having with transition."*

Some veterans expressed dismay and difficulty relating to civilians. These veterans voiced a tendency to keep to themselves in order to reduce stigma producing situations based on past experiences. Veterans are expressing acculturative stress sub-dimensions within environmental and social/interpersonal dimensions. They perceive a language barrier, even though English is often their first language. They also express a loss of social networks, due to their inability to be understood by civilians or understand those with different values.

- *"People don't understand my humor or outlook on life. I have difficulty relating to people who have never been in the military."*

- *"Being in the civilian society I keep to myself and only share what I need to, the bare minimum because I don't feel like I can make good connections with people."*

Satisfaction with Postsecondary Education Programs

Some veterans divulge their displeasure in what they were learning; particularly frustrated that much of what they are required to learn was not applicable to their future. Linear regression analysis supports statements about the practicality of their college experience, Practical Education Satisfaction has the greatest effect on undergraduate veterans' commitment to college (SE = .492).

Veterans believe that postsecondary programs are developed to support passing licensure exams, not necessarily performing well within their future career.

- *"I do not think [college] prepares you for a career. I believe this school has somewhat prepared me to pass my licensure exam, but not how to deal with the real life career of nursing."*
- *"My future [job] requires you to pass a licensure exam in order to work in it, and it was almost immediately clear to me that this program is only designed to make people who can pass the exam, not to make the best workers they can."*

Some veterans are skeptical of the career preparatory value of higher education programs. For some, they believe military service provided them with technical skills and soft skills yet this experience is not valued by civilian employers. Some veterans may understand the exploratory nature of undergraduate liberal arts-based degree programs. Other veterans may not understand or agree with the implied nature of undergraduate level education.

- *"I know that I need a college degree for a job. I don't think that college is actually preparing me for this job. I learned time management in the military, I have not heard about time management in college."*
- *"College as a whole doesn't prepare you. It barely gives the basics unless you are in a very specific program."*
- *"I wish I could combine my military experience with my degree, but college is not a continuation of our careers outside of the military."*
- *"College is a load of crap, I already have one Bachelor of Science working on finishing my second and I still have yet to learn something useful from the majority of classes."*

Veterans also recognize the value and need for intrusive career counseling prior to selecting a degree program. Those who begin with the end in mind, through the support of professional career counselors, are more likely to pursue applicable degree programs.

- *"I think that college can prepare you for a career, but students (vets included) often take a bad approach. They pick a degree and then try to figure out what kind of job they can get instead of focusing on what type of job they want and working backwards in their planning. I don't think military transition counselors do a very good job of teaching this. I can't even say how many military buddies I've had to get out and pursue an associates to get a job that requires at least a masters, or are pursuing a bachelors when they really should be getting certificates or going to a trade school. College can prepare vets for a career, but only if it's applicable."*
- *"I do agree to a certain degree, if the veteran doesn't have clear goals things can be hard."*

- *"This isn't true for me, but others I have served with are struggling [with career preparedness]."*
- *"I am not clear which degree programs would lead to specific career opportunities."*

The Value of Military Service

Finally, veterans are displeased by the exclusion of their military training as "formal training", meaning much of their training is not recognized as undergraduate level training. Currently ad hoc awarding of credits occurs, not systematically, which can be attributed to factors that will be discussed in practical recommendations (Chapter 5). Veterans express frustration that most of their military training does not count for credit (acculturative stress), which may be further exacerbated by program requirements that have little practical application in the minds of these veterans.

- *"I am a retired E-7 and found that most of my management training from the military did not equate to very much on the civilian job market. Anything you can do to get more colleges to accept military training for gen-ed requirements other than courses specifically required by a degree program would be huge. I constantly hear about vets who get credits for military training from their school, but the credits can't be used to fill real requirements. As far as I'm concerned, we've all done enough to warrant not doing extraneous gen-eds and if you're going to give us the credits let them actually count for something useful."*
- *"I think there should be a restructure of how military schools and experience is transferred to college credits."*

- *"From past experience I think most colleges will not give credit for military time. This becomes a money game against the veteran and also makes you not want to finish. I have had many people at my school say the same thing."*
- *"I feel that I have taken classes as part of degree requirements that would not apply toward the field in which my degree is focused. I feel institutions sell this as browsing students as a whole but really does not pertain to information I should know for my future career. I feel it's a waste of money and time for students using TA [tuition assistance] or a GI BILL, and also is a hindrance to the timeliness of students graduating and starting a career."*

Additional Findings

Quantitative and Qualitative Responses

During the analysis phase specifically designed to address the two study hypotheses, the researcher came across additional quantitative results that match the pattern of open-ended, qualitative response themes. Veterans offer a variety of scenarios in response to the question of "Veterans sometimes feel misunderstood when returning to civilian society. Has this ever happened to you? What did you do about it?" Respondents offer a variety of experiences, in college and the workforce, where they have felt misunderstood by civilians, which leads the researcher to believe that it is common for veterans to feel misunderstood in civilian society in everyday situations. To cope, some veterans choose conforming to societal norms as a strategy to avoid potential future misunderstandings and conflict. To proactively avoid stigma or being stereotyped, veterans also take the strategy of keeping to themselves and avoid opening up to civilians. Respondents acknowledge they find it difficult to get to know or even relate to

civilians, due to cultural disconnects (such as humor and values) as well as being stereotyped as being emotionally unstable or being prone to violence.

Veterans are widely considered to be very patriotic, demonstrating love for their country through actions and sacrifices most cannot imagine. In their return to the society they love, some veterans find that their country does not love them back. The “most American” suddenly feel “un-American”, they feel like an outsider in their own country. Their culture is unwelcome and they feel falsely accused in the court of public opinion.

These open-ended responses bolster survey responses on the Veteran-to-Civilian Acculturation Stress Inventory (V2CASI). When reviewing responses, the researcher recognized an unusually high frequency of “(4) somewhat agree” and “(5) strongly agree” responses within the scale (See Table 13.3). For example, 92 percent of respondents affirmed Item 18, “Civilians seem to be just out for themselves.” Similarly, 79 percent of respondents agreed with Item 19, “When people say, “Thank-you for your service,” I think to myself, “You have no idea what you are talking about.”. Further exploration led to recognizing a response difference between veterans attending 2-year institutions and 4-year institutions (See Table 13.3). The reason for this difference in response is currently unknown and requires further exploration.

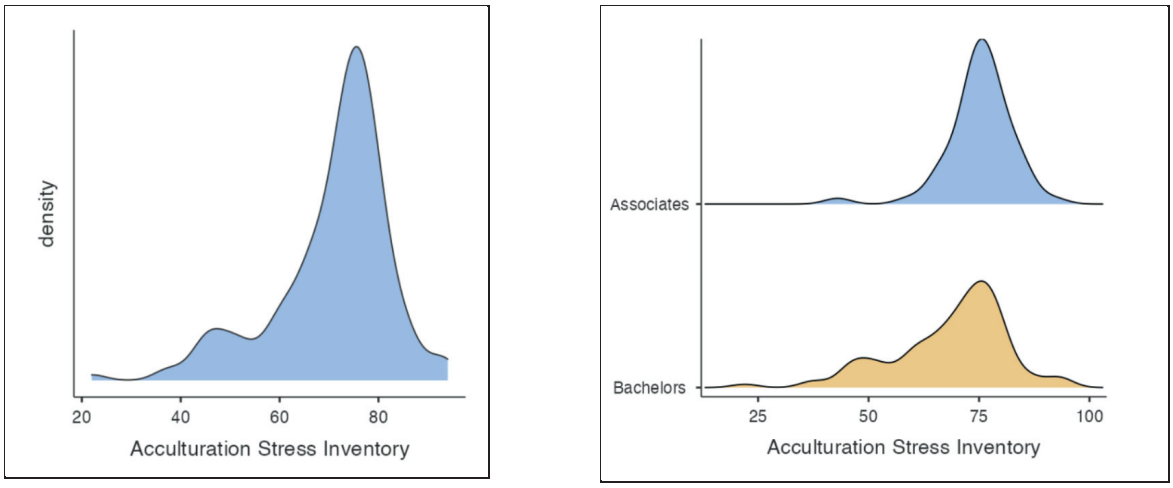
Society may have been conditioned to offer thanks for military service, but this is often understood as a hollow gesture. Veterans are far removed from society during military service, and further removed during military deployments. Currently, there is no formal channel for veterans to educate the public on their military experiences, culture, or sacrifices. Some veterans individually attempt to share their culture within a college classroom or workplace, only to feel as though their experiences are not welcome or worse threatening to workplace leadership. When

sharing military experiences in the hopes of being acknowledged professionally (college credit, job opportunity), veterans express their disappointment and frustration; their service is not seen as valuable enough to merit this type of recognition. A veteran may have earned numerous awards pertaining to leadership, character, and/or technical expertise, yet these badges/awards/medals carry no extrinsic value in civilian society. These experiences have led some veterans to hide aspects of themselves, essentially not feeling comfortable sharing this part of their identity for fear of rejection or judgment. The question this study cannot directly answer is how many veterans feel like they need to hide aspects of their military identity (See Implications). Indirectly, a strong majority of veterans responding to this survey express high levels of acculturation stress, which may correlate with hiding military culture.

The researcher is reminded of a Zulu greeting, “Sawubona", which literally translates “I see you.” This common greeting carries within it the importance of recognizing the whole person, as they are, respecting all parts of their journey. Sawubona offers a polite and simple expression of value and worth; being seen is the first step to being understood and then accepted. This research finds that veterans feel the need to hide aspects of themselves in order to be accepted in civilian society and it is commonly accepted that combat veterans do not share their combat journeys with non-veterans. It appears as though veterans’ identities are not understood or fully accepted by society.

Table 13.3

Density of V2CASI Responses and Responses by Education Level



Quantitative Exploration

During the analysis phase, intellectual curiosity led to uncovering differences in Vocational Identity Measure (VIM) scores between respondents reporting enrollment in 2-year institutions compared to respondents enrolled in 4-year institutions. Undergraduate veterans enrolled in 2-year institutions (N=58) had a median response of 66.0 on the VIM. Undergraduate veterans enrolled in 4-year institutions (N=103) had a median response of 72.0 on the VIM. Respondents who did not list the specific type of institution attended were not included in this analysis. In other words, undergraduate veterans enrolled at 2-year institutions report having a weaker civilian vocational identity than undergraduate veterans enrolled at 4-year institutions.

This research project was designed to explore the relationship between vocational identity and commitment to college. These initial findings pose additional research questions: In what ways do vocational identities differ between veterans in 2 and 4 years institutions? To what

extent does institutional enrollment level impact the vocational identity of veterans? Each of these studies would require additional data to be able to explore and analyze.

Assumptions and Limitations

While the study design was selected to limit the amount of limitations, there were a few unavoidable limitations. Limitations of the study revolve around the study's parameters such as the amount of time and budget, both significant factors on participant sample size and response rate.

1. Self-selected to participate in an anonymous, online survey. It is known that self-selection can impact survey samples and it is assumed that this impacted who chose to participate in the study. Future studies should look for opportunities to perform non-anonymous research, which would allow for follow-up.
2. The focus of this study and the population were limitations in collecting results. This study limited its scope to collecting responses for undergraduate veterans only. Veterans in graduate programs (N=41) offered to complete the survey and completed the initial questions before being disqualified. It is possible that selecting undergraduate veterans was also a limitation.
3. The timeline for gathering survey responses was also a limiting factor. Survey distribution began in April 2021, towards the end of many college/university semesters and during COVID-19 pandemic. Both of these are limitations to study participation.
4. The length of this study limited the amount and form of data collected. A short-term study only captured participant survey responses. A longitudinal study, with the ability to

gather academic data (GPA, credits, etc) would have been able to capture data from undergraduate veterans throughout the duration of their college experience. A longer-term study would be required to track undergraduate veteran performance, based on their responses, to connect responses with outcomes.

5. Comparison group. This study did not capture responses from non-veteran undergraduate students for comparison. A comparison group may have limited the ability to understand acculturative stress veterans perceive, compared to non-veterans.
6. Measures (i.e. acculturation stress, sense of belonging) are perceived rather than actual. Each respondent may have a different perception of acculturation stress for example.

Chapter 5: Conclusions and Implications

This chapter provides a comprehensive summary of the study and a brief explanation of how this study contributes to the body of knowledge. It then provides contextual analysis, practical application, and potential implications of Chapter 4 results. Chapter 5 contains a discussion of findings, implications, and recommendations for future research.

Summary

Prior to discussing conclusions or implications of the study's findings, it is important to reiterate the purpose of the study, to better understand factors that impact veterans' commitment to college. This study is designed to test specific factors found in two plausible hypotheses:

1. Veterans' commitment to college is affected by their sense of college belonging, and perhaps more largely, their discomfort with civilian society.
2. Transitioning veterans have difficulty in college because they are unclear about their future civilian career, and do not believe that college will assist them to become more clear.

To test these hypotheses, an electronic 75-item questionnaire, consisting of five scales, was distributed in the Spring of 2021 to undergraduate veterans enrolled in 2-year/4-year colleges and universities across the country. The five scales, each consisting of Likert-type questions, include measurements of veteran-to-civilian acculturation stress, college commitment, sense of belonging, vocational identity, and practical education satisfaction. The survey also contained three open-ended questions pertaining to the study, and demographic questions. Survey participation was voluntary, no incentives were provided to encourage participation. The rest of

this chapter focuses on discussing conclusions and implications, and offering recommendations based on the study's findings.

Discussion of Findings

This discussion section will address research findings organized by analysis associated with each hypothesis and unique discussion of V2CASI, which was developed and validated specifically for this study. Below is a summary of the findings and a chart connecting location of findings, implications, and future research (See Table 14).

Finding #1: Practical Education Satisfaction predicts College Commitment and Sense of Belonging.

Finding #2: Vocational Identity has a small impact on the relationship between Practical Education Satisfaction and College Commitment.

Finding #3: Veterans enrolled at 4-year institutions express substantially better experiences than those enrolled at 2-year institutions.

Sub-finding A: Veterans enrolled at 2-year institutions express lower levels of practical education satisfaction than those enrolled at 4-year institutions.

Sub-finding B: Veterans enrolled at 2-year institutions report lower commitment to college than those enrolled at 4-year institutions.

Sub-finding C: Veterans enrolled at 2-year institutions report lower vocational identity than those enrolled at 4-year institutions.

Sub-finding D: Veterans enrolled at 2-year institutions express higher levels of acculturation stress than those enrolled at 4-year institutions.

Finding #4: Veterans express high levels of acculturation stress, but especially high in 2-year institutions.

Finding #5: Committed and less stressed veterans attend 4-year institutions.

Table 14

Location of Discussion, Implications, and Future Research

Finding	Discussion	Implications	Future Research
#1.	H^1 Discussion, p. 154	Postsecondary Practices and Supports, p. 159	Practical Education Satisfaction, Predictor of Completion?, p. 171 Active Learning and Practical Satisfaction, p. 172
#2.	H^2 Discussion, p. 154	postsecondary Analysis, p. 158 Accredited and Integrated Training, p. 166	Outcome Factors, p. 169 Career Maturity, p. 174
#3.	V2CASI Discussion, p. 151	Open-enrollment Access, p. 156 Dual Enrollment/Dual Enlistment, p.167	Enrollment Patterns, p.169 Vocational Identity, p.173
#4	V2CASI Discussion, p. 149	Stereotype Training, p.163 Acculturation Stress Inventory, p.166	Addressing Acculturation Stress, p.168 Acculturation Stress and Social Support, p.169 Typecasting, Acculturation Stress, and Sense of Belonging, p. 170 Belonging, p. 175
#5	V2CASI Discussion, p. 152	Acculturation Stress Inventory, p.166	Addressing Acculturation Stress, p.168

			Acculturation Stress and Social Support, p.169 Typecasting, Acculturation Stress, and Sense of Belonging, p. 170

V2CASI Discussion

Acculturative stress theory (Gil et al., 1994) and subsequent multidimensional measure, RASI (Benet-Martinez & Haritatos, 2005), focus on better understanding and measurement of acculturative stress across 5-domains: discrimination, language skills, intercultural relations, cultural isolation, and work challenges. The RASI assesses psychological and sociocultural adjustment aspects of acculturative stress in Asian American populations. This study required the creation of V2CASI in order to measure acculturative stress veterans incur when reintegrating back to civilian society. V2CASI internal consistency (.92) is slightly higher than RASI (.87), suggesting that this measure is reliably and accurately measuring the acculturative stress of military veterans reintegration in civilian society.

The findings within this study indicate a negative relationship between acculturative stress and college belongingness, as well as acculturative stress and practical education satisfaction. These results are expected and consistent with literature addressing acculturation and college sense of belonging (Cavanaugh, 2017; Koo, Back, & Yoon, 2021; and Phillip, 2016). Students experiencing higher levels of acculturative stress are less likely to believe they belong at their institution. Similarly, students experiencing higher levels of acculturative stress are less likely to be satisfied with their education.

This study did not find a significant nor strong correlation between acculturative stress and college commitment ($R^2 = .007$, $p = .27$) (See Table 11.2). The failure of acculturative stress to predict college commitment was very surprising, for two different reasons. First, analysis of results showed unexpectedly high levels of acculturation stress, over half of the participants agreed or strongly agreed with all of the items on the scale. Second, open-ended question respondents put voice to their experiences with acculturative stress, further confirmation of the responses to the items on the scale. The prevalence and level of acculturative stress and the lack of prediction prevalence required additional analysis to further understand why there wasn't correlation with college commitment.

Quadrant analysis divided sample responses into four groups based on mean scores of both V2CASI and College Commitment, sample responses were divided by institution level attended, 2-year or 4-year (See Tables 12.2, 13.3) to examine potential trends. This analysis uncovered a very interesting finding, veterans attending 2-year institutions experience higher education very differently than veterans attending 4-year institutions. Those enrolled at 2-year institutions tend to be less clear of their vocational identity, less satisfied with the practicality of their education, less committed to college, and hold a lower sense of belonging. Simultaneously, veterans enrolled in 2-year institutions expressed a higher sense of acculturative stress (See Tables 12.2, 13.3).

Quadrant analysis (See Table 12.3) provided additional evidence of significant and predictive relationships within each quadrant and independent variables: Vocational Identity, College Belonging, and Practical Education Satisfaction. Independent samples, 2-year and 4-year (See Table 12.4) offered further evidence supporting differences between institutional levels.

This analysis revealed that veterans enrolled at 4-year institutions are much more likely to be committed to college and experience less acculturation stress. In contrast, veterans enrolled at 2-year institutions are much more likely to not be committed to college and experience more acculturation stress (See Table 12.4).

The most puzzling finding included results from both the 2-year and 4-year samples, a high percentage of each group expressed feeling committed while also feeling stressed. This is consistent with insignificant linear relationship between college commitment and acculturation stress (11.2), yet it does not provide further statistical evidence as to the relationship between these two variables, if at all. When reviewing acculturative stress literature, it is possible that the seemingly paradoxical relationship between college commitment and acculturative stress could be dependent on the factor not included within this study, such as social support (Finch & Vega, 2003). Another plausible explanation for the largest percentage of respondents being highly committed to college while also expressing high levels of acculturation stress is the communal culture of the military. Culture, the collective programming of the mind, significantly impacts veterans who have been trained to adopt a communal lifestyle. Veterans, who are already used to self-sacrifice in order to accomplish the military organizational goals, may carry this cultural mindset with them into higher education settings. In this case, self-sacrifice includes being very committed to college, while at the same time feeling very stressed within the environment.

H_1 Discussion

The current study assessed the relationship between known factors related to college completion: practical education satisfaction, college commitment, vocational identity and sense of belonging with a factor, acculturation stress, that has not been applied to the veteran

population, which may contribute to college completion. The complex, layered cultural identities of military veterans have not been explored within the literature focused on reintegration and postsecondary success. Recent studies focused on the student veteran population examine support services and argue for improved services to assist veterans in their transition (Ackerman et al., 2009; Bauman, 2009; DiRamio et al., 2008; DiRamio & Jarvis, 2011; Griffin & Gilbert, 2015; Livingston et al., 2011; McBain, 2008; McBain et al., 2012; Rumann & Hamrick, 2010). The central focus of this literature is increased support for the perceived deficits of student veterans. To paraphrase, higher education can save veterans from their war experiences, and is a "bright spot" in their transition.

Central to the hypotheses of this study, the inquiry reintroduces the main characters, veterans and higher education. This reintroduction questions higher education's archetypal role of the caregiver or mentor and suggests it may play the role of threshold guardian. Veterans come back to society looking for acceptance and understanding. The results of this study showcase evidence that undergraduate veterans are experiencing high levels of acculturative stress within higher education, as discussed in qualitative and quantitative findings, this may be due, in part, to experiences of being stereotyped and discriminated against within their institutions. It is known that marginalization, an acculturation orientation where segregated members of society also don't keep their own culture, is associated with the highest levels of acculturative stress (Berry, 1987). High levels of acculturation stress for veterans may not only be an indicator of lower practical education satisfaction and positive educational outcomes, it may also be an indicator of health outcomes. Castillo et al. (2008) and others (Jenkins et al., 2011; Ward & Kennedy, 1994;

Ward & Rana-Deuba, 1999) all find connections between acculturative stress and medical concerns, including mental health issues.

Veterans, the other main character in this study, are being reintroduced through a cultural lens in order to provide a better understanding of their background and culture. While we may be quick to offer the role of hero, veterans may be more fit to play the character of martyr, acting with selflessness and suffering for the benefit of others. This role seems better suited given the results of this study. Veterans perceive that civilians are soft and complain about superficial things, while veterans have sacrificed years of their lives in service, including war. Veterans also espouse dislike for civilian culture (fake, disorganized, self-centered), which also feeds into the martyr archetype character trait of feeling superior to civilians they are committed to helping, all-the-while complaining about civilian depravity. The archetype of martyr may also explain why so many veterans express feeling committed to college while also feeling stressed. Suffering, including high levels of acculturative stress, may offer a familiar feeling for veterans who are otherwise experiencing significant change during re-entry.

This study uncovers both expected and unexpected findings. The unexpected finding, veterans express higher commitment and less acculturative stress within 4-year institutions, may prove to be the most valuable insight in the long-run. It offers answers to unasked research questions, thus putting out breadcrumbs for future studies. These findings offer practical implications for public policy and practices within higher education institutions, which will be addressed in the implications section. This is an important first look at the rich, fertile ground waiting to be uncovered. It provides evidence that a vast majority of veterans express acculturation stress, and this stress is directly related to their sense of belonging and satisfaction

in college. This study doesn't explore various other identities veterans carry, nor how these identities may impact their belonging in a college setting. For example, it is common for enlisted veterans to also identify as first generation college students, as well as low-income students. While veterans do carry a common background of military service, their life experiences and identities are more than the monolith of "war hero", the intersection of these identities will better assist our understanding of who they are and what factors may predict their outcomes.

Expectedly, this study found practical education satisfaction to be a predictor of both college commitment and college belonging. Secondary analysis found that veterans attending 4-year institutions scored higher in practical education satisfaction, college commitment, and college belonging. Veterans enrolled at 4-year institutions express more practical value in their educational experience, which could be explored to better understand what aspects of their experience they find to be practical as well as what aspect of 2-year institutions other veterans find to be less practical.

H_2 Discussion

This current study also explores relationships between vocational identity, practical education satisfaction, and college commitment. Pilot study analysis found that undergraduate veterans disproportionately completed certain degree programs (See Table 6). Also, veterans are transitioning out of military service, which may require less vocational identity/vocational maturity than the civilian world of work. Both of these factors lead the researcher to explore how much of an impact vocational identity has on college completion.

Results of this study indicate that vocational identity has relationships to both practical education satisfaction (.37) and college commitment (.32), but statistically vocational identity's

impact on the relationship between practical education satisfaction and college commitment is considered relatively weak (.087). The results do find that practical education satisfaction (.65) is the strongest predictor of college commitment for undergraduate veterans. In other words, undergraduate veterans are most likely to be committed to college if they believe that their academic program is providing them with vocationally-relevant skills and credentials. Veterans with a clearer understanding of their civilian vocational identity, are more likely to believe that college is providing them with applicable training and credentials. Veterans who are clear on their civilian vocational identity, may also be committed to college even if they do not believe their program to be vocationally-relevant. Overall, some of the results were expected and consistent with literature on career counseling/career development and college completion (Lee et al., 2011; Wright, Jenkins-Guarnieri, & Murdock, 2013). It is somewhat surprising that practical education satisfaction had a much larger effect on college commitment than vocational identity.

Implications

A number of practical implications to be taken from this research that could be applied within postsecondary institutions, Department of Defense, and Veterans Affairs to better support veterans acculturation, career development, and success in postsecondary programs. The rest of this section will discuss potential implications and future research based on the findings of this study.

Open-enrollment Access

Veterans are disproportionately enrolling at open-enrollment community colleges compared to their non-veteran peers (See Table 4) (Smith, 2015), those enrolled at 2-year

institutions express more difficulties (sub-findings), and experience reduced outcomes (See Tables 3.1, 4, 5) (Smith, 2015). While the disproportionate enrollment cause is not known, it is reasonable to assume that open-enrollment policies are a factor in veterans selection of 2-year institutions over 4-year institutions. The pressure for veterans to complete a degree program and gain reasonable civilian employment during their prime earning years cannot be understated. Many undergraduate veterans are coming to higher education behind their peers, beginning postsecondary pursuit as a non-traditional student after an average of six years of military service. This study recommends reviewing public enrollment policies, 2-year and 4-year institutions, for veterans re-entering civilian society.

If veterans were offered open access to 4-year, public institutions it is reasonable to think that more veterans would consider directly enrolling at these universities, rather than hoping to transfer or complete an associates degree prior to transferring. Service members are discharged from military service based on the completion of their enlistment contract, which is unlikely to line-up with application deadlines of higher education institutions. Service members have already put their lives on hold to serve society, in doing so veterans stepped off the typical societal professional development ladder (college, entry-level, mid-level, executive, senior executive). Welcoming veterans into public universities, based on their transition timelines, would be a meaningful and practical expression of public appreciation, a sincere “thank-you for your service”. This change of practice would allow veterans to return to the professional development ladder without starting at the bottom rung. Veterans attending 4-year institutions express higher levels of college commitment and lower levels of acculturation stress. Open-access to 4-year institutions may reduce veterans’ disproportionate enrollment in 2-year

institutions, increase veterans' persistence rates, and may also reduce mental health issues connected to higher levels of acculturation stress.

The question that should be asked by policy-makers (of all levels) is, what postsecondary environment offers veterans the greatest chance for holistic success? The answer to this question is likely nuanced and may differ depending on the person. Yet, degree completion evidence is clear, 4-year institutions boast nearly double the completion rates of 2-year institutions. The Association of Public Land Grant Universities (APLU) prohibits discrimination of individuals on the basis of identity, including veteran status. APLU also advocates for increasing access to postsecondary education through improvement of public policy. Currently, undergraduate veterans are disproportionately enrolling at 2-year public institutions compared to their peers (See Table 4) and may be struggling to complete degree programs at the same rate as their peers. Reviewing land grant university policy associated with veterans applications and acceptance practices may reveal unintended barriers that could be updated.

Postsecondary Analysis

Currently, robust analysis of undergraduate veterans' postsecondary performance is somewhat limited. One major factor predicting this limitation is the lack of applicable data being collected that would allow for meaningful analysis at both state and national levels. The researcher strongly recommends two similar policy improvements that would positively impact the ability to perform better analysis of veterans in postsecondary education and their outcomes.

First, IPEDS should collect student level record detail on veteran status, which would allow for comparative analysis of veterans' outcomes. Historically, IPEDS collects institutional characteristics data on whether institutions participate in programs to serve veterans (Military

Tuition Assistance Program, Post 9/11 GI Bill, Yellow Ribbon Program). IPEDS does not request student level records pertaining to veteran status, which would allow for more robust, longitudinal studies. IPEDS, in partnership with DOE, VA, and DOD is working to expand outcome measure data being collected on student veterans. Currently, "During School" and "Graduation/Completion" measures have been agreed upon. Future exploration includes the ability to track time to degree, as well as other important measures to better understand the behavior of all undergraduate veterans. This includes tracking the number of institutions attended prior to completion, employment rates of completers, unemployment rates, and average salary of graduates. These are all standard measurements for non-veteran students, thus collecting the same data for veteran students would allow for comparative analysis.

Second, the Institute of Education Statistics (IES) oversees the Framework for Statewide Longitudinal Data Systems (SLDS) and distribution of grant funding to support the work of individual states. One of the goals of the SLDS grant program is to increase inter-agency data governance to improve the quality of data collected and the ability to connect data from early childhood through workforce, which is commonly referred to as P-20W+, or prekindergarten, K12, and postsecondary through post-graduate education, plus workforce and other outcomes. Sustainable data governance efforts require framework approaches for their quality, effectiveness, and relevance. The researcher advocates for including veteran status within the P-20+ framework for the purpose of enhanced understanding of when individuals join the military (age, education attainment, employment history), when service members transition out of military service back to society (length of service, age, education attainment during service), and status once transitioned out of service (employment status, average salary, education

attainment, and other statuses). Establishing a purpose for including veteran (and service member) data within SLDS frameworks is the first of seven steps. Ultimately, the inclusion in SLDS would allow researchers the ability to examine data associated with veterans employment and education outcomes in order to make informed policy and practice decisions. This provides the opportunity to ensure that agencies, non-profits, and key stakeholders focused on veterans have the data to improve program effectiveness and work together on state and national initiatives.

Postsecondary Practices and Supports

Study results show that undergraduate veterans are committed to college if they think that it provides them with vocationally relevant skills that they will use in their future careers. It is also true that undergraduate veterans are more likely to perceive that college is training them in relevant skills if student veterans are more clear on what they want to do for a living. Both of these have significant practical implications for higher education institutions as well as organizations and agencies supporting undergraduate veterans. The combined findings echo literature focused on career maturity, specifically on career decision-making and decision-making difficulties. Literature finds that individuals who are insecure, anxious, and vulnerable tend to struggle with indecision, compared to others (Albion & Fogarty, 2002; Caldwell & Burger, 1998; Kanfer et al., 2001; Martincin & Stead, 2015). Research on first generation college students finds that complex social transitions and difficulties adapting to college settings negatively impact career decision-making. Veterans carry a number of risk factors associated with decision-making difficulty. The pilot study found evidence that undergraduate veterans are more likely to be enrolled in a general studies associate's degree than

their non-veteran peers (See Table 6). This could be an indicator of low levels of career decision-making self-efficacy, which includes avoidance of degree selection, actively gathering career information, and discovery of skills and interests.

Vocational maturity is an important precursor to college commitment. As veterans are processing their transition between military service and civilian careers, intentional and proactive career counseling would ensure they have a better understanding of the world of work and how they fit into it. This study recommends that veterans who use the G.I. Bill, regardless of injury/disability status, receive formalized career counseling at the beginning of their academic journey. Career counseling may help veterans address cultural differences between military and civilian jobs. For example, career counseling would have veterans better understand what type of education requirements are necessary to enter specific careers, as well as what type of continuing education would be required to progress within the career. It may also help veterans to narrow down career choices to those that better fit their values and skills.

Proactive career counseling would benefit higher education institutions. Since vocational maturity has a direct effect on college commitment, it is reasonable to think that veterans who have been provided career counseling would be more likely to stay at their institution than those who do not receive career counseling. This would improve the institution's overall retention and graduation statistics and quite possibly reduce veterans' time to completion (D'Amico et al., 2019; Moore, 2021; Whiston et al., 2017).

Proactive career counseling for service-members transitioning out of the military would also provide a benefit to the Department of Defense and Veterans' Administration. Civilian vocational maturity would help transitioning service members have a clearer understanding of

their potential roles in the civilian workforce which would help smooth their transition. It is reasonable to think that vocationally mature transitioning service members, who are able to clearly articulate their civilian career goals and carry out career decision-making plans, would be positive representatives of the military in civilian society. Vocationally mature veterans would reflect well on their respective branch of military and the DOD.

Transitioning service members going through career counseling prior to entering college or civilian career fields would also be positive for the VA. Veterans using G.I. Bill benefits to attend postsecondary institutions are required to complete applications and subsequent forms to exercise these educational benefits, which include specifying degree programs or change of program. Career counseling prior to use of G.I. Bill benefits are likely to increase veterans' vocational maturity, satisfaction with their education, and commitment to complete college. Each of these factors are impacted by G.I. Bill paperwork processes, less vocationally mature veterans complete forms more often due to changes in degree programs and changes in institutions. The reduction in paper-work processing would save significant processing time, reduce overall cost, and increase veterans' satisfaction of services provided to them.

Practical Postsecondary Education

Research findings strike at the core of the postsecondary industry. Undergraduates are much more likely to commit to their institution if they perceive the institution is teaching them skills with practical application. Undergraduate veterans strongly believe that their professors are out of touch with reality, yet also believe that they are learning a lot from their textbooks. It is possible that the common practice of lecturing is not the most effective way to teach or learn. Evidence indicates more knowledge and skill is gained through active-learning sessions than

from lectures. Meta-analysis of 225 studies pertaining to STEM teaching and learning indicates that students earn a half letter grade higher through active-learning sessions than through lectures, additionally students are 1.55 times more likely to fail lecture-based classes (Freeman et al., 2014).

This is significant on a national scale, over half of STEM courses are taught utilizing nearly exclusively lecture formats. This means that at-risk students, who are more likely to have academic difficulty, are more likely to struggle in lecture-based STEM degree programs. The researchers recommendation is to review STEM programs, specifically, and all undergraduate programs, in general, and look for opportunities to increase active-learning components of the degree program.

From a cultural perspective, active learning components would closely align with military training modalities. For example, sergeant's time training (STT), is an active-learning based practice woven into the fabric of Army culture. STT is "hands on, practical training" for all enlisted soldiers, taught by their enlisted leadership typically in weekly increments. Those with expertise and experience are relied upon to conduct training in accordance with Mission Essential Task Lists (METL) to ensure that all enlisted soldiers are able to carry out their duties and accomplish their mission.

The origin of lecture halls and lecture style instruction, within U.S. Colleges and Universities, stems from the teaching of WWII veterans returning from Europe. There was a significant need to educate large groups of non-traditional learners quickly and efficiently. The purpose of this style of teaching is no longer urgent and does not serve the best interest of postsecondary institutions, faculty, nor its students. Evidence indicates that active-based learning

is a more effective instructional approach and specifically for undergraduate veterans, this approach would be much more familiar. It is likely that active-learning environments would positively impact undergraduate veterans academic performance.

This research project finds evidence that veterans tend to perceive that they sometimes feel as though they do not belong at their institution. This study recommends increasing active-learning components within postsecondary programs not only from an academic success perspective, but additionally (and more importantly) from a socialization perspective. Lecture-based learning environments limit engagement between students as well as with the instructor/professor. It is likely that increased interactions with peers would support undergraduate veterans' sense of belonging. This may also help to address veterans' perceptions of their peers. Findings include veterans' strong belief that civilians are selfish and self-serving.

Stereotype Training

Open-ended responses, survey findings, as well as literature indicate that non-veteran students, institutional staff, and those with hiring authority, such as human resources managers, can have implicit bias and internal stereotypes about veterans. These stereotypes may inhibit veterans' perceptions of belonging, as well as act as potential barriers to program enrollment as well as future employment within certain fields. Higher education institutions are focused on increasing access to college, reducing bias, and using more inclusive language to ensure all feel welcome. Diversity, equity, and inclusion (DEI) work focuses on creating learning and workplace environments that allow all people the opportunity to thrive personally and professionally. Diversity, the presence of differences within a setting, can mean differences based on race, ethnicity, gender, gender identity, sexual orientation, or socioeconomic status. It is

strongly recommended that DEI work to include training to increase the understanding of veteran/military culture. Inclusion of military culture within colleges/universities and workplaces would increase non-veterans understanding of veterans, address long held stereotypes, and potentially allow for meaningful conversations to reduce bias.

Sense of belonging research indicates that the language used within formal and informal settings can have a significant influence on students' sense of belonging. Since veterans are also a minority student population, it would be beneficial to consider practical steps to ensure they feel welcome and accepted within college/university settings as well as within the workforce. This includes training faculty and staff to better understand this population, reduce misperceptions, and increase faculty/staff's ability to support their veteran students. Stereotypes that should be addressed include the misperception that veterans are not very intelligent; veterans are not good at interacting with others; veterans are monolithic, political extremists; and all veterans are prone to violent outbursts. Stereotype reduction on college campuses would increase the likelihood of veterans feeling as though they belong, it would also increase staff/faculty's cultural competency which would likely improve their ability to engage with veterans in the classroom and on the campus.

Stereotype reduction training is also strongly recommended for industry, specifically human resource staff. Literature indicates that human resource managers hold assumptions about what occupations veterans are "good fits" for, which is based on stereotyped perception that veterans are not good at interacting with people. Stereotype reduction training is common in workplace settings, addressing bias and ignorance through education and awareness, and there is evidence that interventions can be effective in reducing stereotyping, at least in the short-term

(Burns, Monteith, & Parker, 2017; FitzGerald et al., 2019; Liu et al., 2021). Specific training on military and veteran culture would improve veterans' access to employment of their choosing as well as ability to engage with their civilian peers.

Acculturation Stress Inventory

Undergraduate veterans are wrestling with their own identities when they return to society. It is not known to what extent this stress impacts their actions or decision-making. We do know that veterans express difficulty and may not have professional support to assist them with this matter. Practically, it would be significantly beneficial to offer acculturation programs for veterans within academic settings (Hou, Osborn, & Sampson, 2018; Yu, Liu, & Yue, 2017). This is done for students coming from other countries to study in the U.S., it could also be done for veterans as well. There could be hidden assumptions that veterans already know and understand the culture, which ignores the stressors they are experiencing.

Practically, it would make sense for institutions and agencies to begin asking veterans about their acculturation journeys. For example, it is common for Veterans Health Administration (VHA) to ask veterans about their mental health during medical appointments. It seems reasonable that asking about acculturation stress, which approaches veterans through an asset lens, would empower and educate veterans about their own identity, what choices they could make to mitigate their stress due to cultural differences, and where they could use help. This type of approach would also normalize proactive discussion and training on strategies and choices available when entering a different culture.

Accredited and Integrated Training

A vast majority of service members are enlisted (83 percent), yet professional development training for enlisted service members tends to be done "in house", meaning training is not recognized nor applicable outside of the organization. If military training programs for enlisted service members were reviewed by external accrediting bodies or integrated with accredited training programs already in existence, the quality of the training and training outcomes would likely increase.

For example, the Council for Six Sigma Certification (CSSC) provides accredited training on an international scale, in over 165 countries. Six Sigma Certification provides tools and techniques to improve internal business performance, reduce risk, and identify errors. Agencies within the federal government have already adopted Six Sigma Certification and training programs within the Internal Revenue Service (IRS) and the VA.

Enlisted leaders, non-commissioned officers (NCOs), are given authority and responsibility to manage various projects pertaining to their occupation. Integration of Six Sigma Training within DOD would not only provide high quality training to improve the performance of the military, but it would also provide enlisted service members with recognized and accredited training that could be used in the civilian world.

The Air Force established their own accredited community college in 1972. The Community College of the Air Force (CCAF) was established specifically to enhance the skills of their NCOs, improving their technical and leadership skills. Since its establishment, CCAF has grown to enroll over 300,000 students annually and is overseen by the Southern Association of Colleges and Schools Commission (SACSC). It is recommended that the other military

branches perform a cross-functional review with the Air Force to better understand how CCAF impacts the training and readiness of their service members, as well as review longer-term outcomes associated with enrollment in CCAF.

Dual Enrollment/Dual Enlistment

Dual enrollment programs offer high school students the opportunity to take college courses while earning their high school diploma. Dual enrollment offers students the opportunity to get a head start on postsecondary credits, while being fully immersed on college and university campuses. There are additional benefits for high school students to participate in dual enrollment programs, such as: exploring majors, increasing their likelihood of attending college after high school, and improved understanding of the culture of college campuses (Grubb, Scott, & Good, 2017).

Gray-Lobe, Pathak, and Walters (2021) find positive, long-term effects of pre-school on college enrollment. Long-term effects include positive behavioral traits conducive to educational attainment and had larger effects for boys than for girls. While not known at this time, it is possible that earlier exposure for enlisted service members would allow for similar long-term outcomes. Enlisted service-members are currently able to attend college, yet this is done around the requirement of their duties, but more importantly classes are taken on military bases via education centers. These opportunities limit the ability of service members to engage with civilians and learn within the context of the civilian cultural environment. If service members had the opportunity to enroll in a local college near their duty station and have this count towards part of their enlistment contract, it may increase their understanding of college and confidence that they belong in the classroom with civilians.

Future Research

In the process of collecting and reviewing current literature focused on student veterans, it was apparent that gaps exist in various domains examined. Future research is needed to further knowledge and application of knowledge. This section will recommend and discuss future research in the following domains: acculturation stress and student engagement, practical education satisfaction and college completion, career decision-making self efficacy, career maturity and typecasting, moral injury and higher education, and student veterans short-term and long-term outcomes.

Addressing Acculturation Stress

Current literature addressing acculturation stress within the context of higher education focuses on international student populations. It appears as though the dimensions and sub-dimensions of acculturation stress are applicable to the veteran population as well. Future research is needed to better understand connections between acculturation stress impacts veterans during their transition from military service back to civilian society.

The findings of this study indicate that veterans are experiencing high levels of acculturation stress, and findings include statistically significant correlation between acculturation stress, sense of belonging, and practical education satisfaction. The foundational work of this study is intended to spark additional research focused on aspects of acculturation stress and military veterans. Future studies would help to understand the strategies that veterans take in addressing their own re-entry into civilian society, which includes addressing acculturative stressors.

One recommended future study is to work with transitioning service members to better understand their level of awareness of what acculturation stress is and which sub-dimensions may be more stressful for them during their upcoming transition. Ideally, a longitudinal study, that would allow for tracking transitioning veterans over a period of ten years, would be instrumental in understanding basic aspects of acculturation stress: are these stressors constant, cyclical, or periodic? Are some stressors more likely to persist long after a transition period than others? Are specific sub-dimension factors predictive of "successful transitions"?

Another pertinent acculturative stress study includes focusing on workforce transitions of veterans. Gathering acculturative stress data from veterans working across various industries would be beneficial in better understanding which occupations are related with high levels of stress and which are related to lower levels of stress. This research may uncover cultural norms within specific occupations or groups of career clusters that could be replicated to reduce stigma and stereotyping of veterans in the workplace.

Acculturation Stress and Social Support

A future study recommendation includes understanding the relationship between acculturation stress and social support of undergraduate veterans. While this study did not find significant correlations with acculturation stress, veterans express high levels of stress. An intervention study providing groups of servicemembers with stress and coping training, to include cultural learning may prove to mitigate acculturation stress through veterans ability to gain civilian social support upon return. Literature finds asset-based approaches to support international students through cross-cultural contact to be effective interventions (Finch & Vega, 2003; Hou, Osborn, & Sampson, 2018; Yu, Liu, & Yue, 2017). Preparation, orientation, and

cultural skills acquisition training before entering a new culture ensured the students had proper tools in order to engage with the dominant culture.

Enrollment Patterns

The pilot study found that veterans have been disproportionately enrolling in 2-year colleges (See Table 4). Additionally, findings indicate that veterans enrolled in 2-year colleges have a lower outlook on their experiences than those enrolled in 4-year institutions. Due to both of these factors, it is recommended that future research include a national study on the enrollment patterns of undergraduate veterans compared to their non-veteran peers. Specifically, comparing first-time, degree seeking students by level of education pursued. This research would confirm or deny whether enrollment patterns at public institutions in one state are representative of enrollment patterns across all fifty states.

Outcome Factors

Additional research is needed to clarify what factors have direct implications to veterans academic success. One of the limitations of this study is the inability to gather academic progress data (G.P.A, credits attempted/credits earned, 2nd-year retention, etc) for analysis with survey responses. This type of analysis would allow for potential identification of early indicators of success or barriers to success. Practical strategies could then be scaled up to more effectively support veterans program completion, commonly referred to as a response to intervention (RTI) model.

Within the open-ended comments, veterans express frustrations in academic program requirements as well as lack of recognition for military service. This includes being required to take general education courses that many veterans perceive as not practical and wasting precious

time. A future study should look at correlations between credit for prior learning (military service), practical education satisfaction, and postsecondary completion. This study would help to identify best practices for long-term outcomes associated with awarding and assessing credit for military experience. Currently, Joint Services Transcripts (JST) provide unofficial credit recommendations, yet evidence of increasing postsecondary completion is unknown.

Along the same lines, a longitudinal study, following veterans through their academic journeys would allow for measuring changes in potential key indicators, vocational maturity, practical education satisfaction, and college commitment. A limitation of this current study is its ability to only capture responses at an unknown point in time. A long-term study would be able to measure changes in these factors overtime, thus allowing for better prediction and proactive approaches to address these factors.

Typecasting, Acculturation Stress, and Sense of Belonging

In this study, veterans express high levels of acculturation stress and statistically significant, linear correlation with sense of belonging in college. Somewhat unexpectedly, this study did not find correlation between vocational identity and acculturation stress. Typecasting research finds that veterans are likely to be stereotyped as being high in agency and low in feeling, or in other words they can plan and act, but have no feelings. Moral typecasting research finds that highly ethical leaders are helped less because they are seen as needing less help (not seen as victims) (Yam et al., 2018). At this time, it is unknown if there is a relationship between typecasting and acculturation stress, and if these factors help to better understand which factors may predict higher education and employment outcomes. It is recommended that future studies look for connections between typecasting and acculturation stress.

One future study could look for whether typecasting is a predictor for academic program selection as well as acculturation stress. If actors (staff, faculty, administrators) typecast veterans during admission, program selection processes may have longer term effects on how veterans are perceived on college campuses. If veterans are seen as moral leaders, they may be offered less assistance than students that are considered victims.

This study also found that a majority of undergraduate veterans perceive that "Professors seem to have no idea of what goes on in the real world" (Item-39, mean response: 3.78). This likely impacts veterans' engagement with professors throughout their academic journey and possibly their engagement with classroom educational content. Future research should investigate the benefit of reverse mentorship for undergraduate veterans. Reverse mentorship, where the novice participant is placed as the mentor and the experienced participant is the mentee (Chaudhuri & Ghosh, 2012; Murphy, 2012). Studies find that reverse mentorship enhances the student-professional relationship, increases understanding of the practical application of classroom instruction and community connection (Chatlani, 2018; Yaron, 2014), and positively impacts social and emotional engagement within an organization/institution (Bliss & Dufrene, 2006; Chaudhuri & Ghosh, 2012; Stephens, 2012). Reverse mentorship may impact undergraduate veterans' perceptions of acculturation stress, sense of belonging within their institution, and typecasting by institutional staff and faculty.

Practical Education Satisfaction, Predictor of Completion?

This research project found a strong correlation between practical education satisfaction and college commitment. At this time, it is not known if either of these measures have linear relationships with retention or graduation. It is recommended that future studies further explore

practical education satisfaction and college commitment. One potential future study could focus on investigating connections between practical education satisfaction and general education course requirements. It is known that general education courses are significant factors in student success, retention, and graduation. It is not known whether undergraduate veterans' perceptions of practical education satisfaction is impacted by the amount of general education requirements within degree programs (in general), and whether being awarded life experience credit (fewer general education course requirements) has an impact on both practical education satisfaction as well as retention and graduation (Hall, Culver, & Burge, 2012). It is possible that there is a range of general education credits awarded that would lead to increased satisfaction as well as positive outcomes.

A second study should be focused on investigating the practical education satisfaction of undergraduate veterans, by major at 2-year and 4-year institutions. This will better inform policy-makers of which programs veterans perceive to be more and less vocationally-relevant. Practical education satisfaction strongly predicts college commitment and should be considered a success indicator for undergraduate veterans, maybe above any other indicator.

Active Learning and Practical Satisfaction

Undergraduate veterans transition from a culture of active learning. As previously discussed, veterans are very familiar with hands-on training, a preferred training method across all branches of the military. As previously discussed, active learning is a high impact practice within postsecondary programs, specifically within STEM programs. Future research is needed to better understand how veterans perform in degree programs within active learning components, compared to degree programs without (or very little) active-learning components

(Johnson & Stage, 2018). Additionally, it would be important to understand how aware undergraduate and transitioning veterans are of differences between degree program types (active-learning based/non active-learning based). The results of this research would allow for an objective measure of military/veteran friendly institutions and programs. Currently, this term is a recruitment tool for colleges and universities.

A study connecting acculturation stress and active learning is also recommended. This could be a pre/post intervention study focused on first-year undergraduate veterans. The initial test would capture baseline acculturative stress levels of veterans during their first semester. The intervention would include components informing students of acculturative stress and cross-cultural information. For example, framing active learning through a military cultural lens. These types of competencies, empower veterans to value their culture while reducing stressors associated with learning/re-learning civilian culture. A post-test, given at the end of the intervention program, would be administered to measure changes to acculturative stress due to cross-cultural training and information sessions about acculturation, acculturative stress, and acculturative career planning.

Vocational Identity

Additional analysis within this study found differences in vocational identity measure scores between veterans enrolled in 2-year and 4-year institutions. This study could not explore or explain these differences with the current data collected. It is recommended that future studies explore the differences within undergraduate veterans and look for possible opportunities to proactively address the lower vocational identity of veterans enrolling at 2-year colleges. Veterans are disproportionately enrolled in community college (See Table 4), and seemingly

have a lesser understanding of their civilian vocational identity. It is important for future studies to further explore the vocational identity of undergraduate veterans to better understand what factors might impact this disparity.

Career Maturity

This study looked at one aspect of career maturity, vocational identity and did not find a strong correlation (.113, $p<.001$). There are other stages of career maturity that could be impacting optimal vocational decisions of veterans. One such study would be asking newly enlisted service-members to work with independent career counselors to map out their career path. Those who are hoping to make a career out of the military would still value from learning about civilian career paths once they retire from military service; those planning to leave the military prior to retiring would benefit from developing a plan before exiting the military, and those who are undecided would be provided with information to help them make this decision. Literature speaks to the value of career counseling at a young age, which for veterans could be beneficial upon entry to military service (Gibbons & Borders, 2010; Greenbank & Hepworth, 2008; Hughes, Gibbons & Mynatt, 2013; Reardon, Folsom, Lee & Clark, 2011; Soria & Stebleton, 2013).

Belonging

The focus of this study was exploration of what factors might predict college commitment, which is a first look into what factors may predict veterans' college completion. Along the way, belonging emerged as an important theme within open-ended comments and was also found to have negative correlation with acculturative stress. Future studies should explore factors of belongingness, such as acceptance/inclusion and rejection/exclusion, and their

relationship with acculturation stress (Malone, Pillow, and Osman, 2012). The results of this study were clear, undergraduate veterans express high levels of acculturation stress, yet the meaning of this finding is not as clear. Future studies could focus on exploring relationships between acculturative stress and belongingness. The General Belongingness Scale (GBS) has been proven to predict well-being in college students. Correlation between the GBS and V2CASI would significantly increase understanding of veteran college students and the ability to better support their needs.

Conclusion

Higher education leaders, policy-makers, and veterans' advocacy groups have expressed significant interest in seeing veterans succeed in college. This study assists these respective groups in better understanding which factors impact undergraduate veterans during their academic journey. The theoretical lens of acculturation was blended with the lens of career development in order to showcase the impact of cultural stress on veterans' sense-making of their identity within the civilian world. Results of this study show evidence that most veterans experience acculturative stress, which impacts their sense of belonging at their institutions and practical satisfaction within their academic programs. This study also finds that practical education satisfaction and vocational identity both impact college commitment, with practical education satisfaction making the largest impact. This study offers an acculturative career planning theoretical model as a solution to proactively address individual and societal factors impacting their postsecondary journeys. Finally, this study provides recommendations for further exploration of acculturation stress, vocational identity, practical education satisfaction, and sense of belonging.

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Appendix A: Disclosure Form

Principal Researcher: Michael Smith, Ed.D. Candidate
msmith364@mail.endicott.edu

INTRODUCTION: This research will ask you questions about your experiences in college, transition out of the military, and career exploration experiences. The purpose of this study is to better understand the experiences of military veterans enrolled in undergraduate higher education programs and factors impacting their academic success. The goal of this study is to better understand relationships between career planning, civilian acculturation, and academic satisfaction with college commitment and academic performance.

PARTICIPATION: Taking part in this survey is completely voluntary. You may stop your participation at any time by closing the browser window to exit the survey. There is no penalty for ending participation. You are free to decline to answer any question you do not wish to answer. There are no right or wrong answers. No names, email addresses, or IP addresses will be collected to ensure anonymity.

RISKS: There are no foreseeable risks involved in participating in this study other than those minimal risks encountered in day-to-day life.

BENEFITS: The benefits of participation in this study include contributing to the understanding of veterans cultural and career transitions out of the military into civilian life. Your participation will also aid in furthering understanding of the needs of transitioning Veterans so that others' providing support services can better address these needs in the future.

ANONYMITY/CONFIDENTIALITY
Your name or identity will not be used in reports or presentations of the findings of this research. Information provided to the researchers will be kept anonymous, meaning that no identifying information (such as your name, email address, or IP address) will be collected with this survey. Information collected by the researchers is anonymous and will only be shared in the aggregate (summary level). With the exception of information which must be reported under Massachusetts and Federal law such as cases of child or elder abuse. This research project has been approved by the Institutional Review Board at Endicott College. Thank you for your help.

RESULTS: An analysis of the results and an explanation of the study will be available in the Endicott College School of Education upon publication in the Fall of 2021. The results of the study may be published in journals and presented at academic conferences subsequently.

CONTACT: For questions or concerns about the research, please contact the primary researcher, Michael Smith at msmith364@mail.endicott.edu or faculty advisor, Laura Douglass ldouglass@endicott.edu.

ELECTRONIC CONSENT: Continuing with this survey indicates that you have read the above information, that you are voluntarily agreeing to participate and that you are 18 years of age or older.

For concerns about your treatment as a research participant, please contact:
Institutional Review Board (IRB)
Endicott College
376 Hale Street
Beverly, MA 01915
irb@endicott..edu

Appendix B: Questionnaire

Veteran 2 Civilian Acculturation Stress Inventory (V2CASI)

5-Point Scale (Strongly Disagree - Strongly Agree)

1. I sometimes feel that my military background is held against me during job searches.
2. I don't know how to get ahead in civilian life.
3. Because of my military background, I have to work harder than most civilians.
4. In looking for a job, I sometimes feel that my military background is a limitation.
5. People in the civilian world are offended by my sense of humor.
6. When I'm around civilians who are laughing and goofing around, I feel myself getting pretty damn irritated.
7. I feel that how I learned to live in the military has caused conflicts with civilians.
8. I have had disagreements with civilians for doing things in a "military" way.
9. I feel that my veteran/military practices have caused conflict in my relationships.
10. When civilians hear that I have been in the military, they expect me to be trouble.
11. I am often treated unfairly because of my military background.
12. I feel that civilians often interpret my behavior based on their stereotypes of what veterans are like.
13. I feel more alone and disconnected now than I did when I was in the military.
14. When I socialize where I am the only veteran, I often feel different or isolated.
15. I don't know where I fit into society.
16. There is no one in civilian life that matters to me as much as the people with whom I served.
17. I wish I felt as alive now as I did when I was in the military.
18. Civilians seem to be just out for themselves.
19. When people say, "Thank-you for your service," I think to myself, "You have no idea what you are talking about".

Practical Education Satisfaction

5-Point Scale (Strongly Disagree - Strongly Agree)

1. Going to school feels like an investment in my future.
2. I can see how the things I'm learning in classes will help me to get a job, and perform the job better.
3. If I miss a class, I feel like I am missing something important.
4. College is not really teaching me what I think I need to know.
5. I can't really see how much of what I am learning in college is going to help me in the future.
6. I feel like a lot of what I'm doing in school is a waste of time.
7. Most of the things I read for class seem really useful to my future goals.
8. In class, I often think, "What in the world am I doing here?".
9. Too many of my professors seem to have no idea of what goes on in the real world.
10. In hindsight, I would not have taken many of my classes if I had known how little they applied to my future.
11. On the whole, I have learned a tremendous amount by going to this college.

College Commitment Scale

5-Point Scale (Strongly Disagree - Strongly Agree)

1. There is no doubt in my mind that I will get my degree from this college.
2. I sometimes wonder if I should be at this college at all.
3. I have thought seriously about leaving this college.
4. I am definitely going to re-enroll here next semester.
5. I am confident that this is the right college for me.
6. This might not be the right time for me to be in college.
7. I sometimes skip class to do something else that seems more important or enjoyable.
8. These days, doing well in college is the highest priority in my life.
9. To be honest, I am not really interested in school and I don't put much effort into it.
10. I often decide to do work for my classes instead of going out with friends.
11. I hardly ever turn in anything late.
12. I probably work harder at school than is necessary because it really matters to me.
13. When I am in class, I am often texting or looking at things online instead of listening to whatever the professor is talking about.

Student Belongingness

5-Point Scale (Strongly Disagree - Strongly Agree)

1. I feel at home at my college/university.
2. Being at my college/university is an enriching experience.
3. I wish I had gone to a different college/university.
4. I have found other students in my program to be welcoming.
5. I am shown respect by staff and faculty at my college/university.
6. Sometimes I feel like I don't belong at my college/university.
7. I feel that a faculty member would be sensitive to my difficulties if I shared them.
8. I feel that a faculty member would be sympathetic if I was upset.
9. I feel comfortable seeking help from a teacher before or after class.
10. I feel that a faculty member really tried to understand my problem when I talked about it.
11. I feel that a faculty member would take the time to talk to me if I needed help.

Vocational Identity Measure

5-Point Scale (Strongly Disagree - Strongly Agree)

1. It is clear to me what I want to do for a living and that I have the right abilities to do well in it.
2. I know what occupational path I want to pursue when I get out of school.
3. I have a clear sense of my occupational interests.
4. I could easily describe my ideal job to a recruiter.
5. I know what type of work I would like to do for the rest of my life.
6. I have a strong sense of who I am related to the world of work.
7. My interests match my vocational goals.
8. I have no problem deciding what I want to do for a living.
9. I have a firm sense of what type of work I would like to do for a living.
10. I am having a difficult time choosing what type of work I would like to do [R].
11. I know which type of occupation I would enjoy doing in the future.
12. I have made a firm decision regarding what I want to do for a living
13. I know what kind of work suits me best.
14. I can readily envision what kind of work I want to be doing when I graduate.
15. I cannot make a decision about what I want to do for a living [R].
16. I have a pretty good sense of what type of work I would like to be doing when I leave school.
17. I feel that the vocation of my choice will be the best possible fit for me.
18. I feel like I am on a definite vocational path for the future.
19. I have certain vocational goals that I would like to pursue when I get out of school.
20. It is clear to me what I want to do for a living after I graduate.

Open-ended questions

1. How would you describe differences between military and civilian culture?
2. Veterans sometimes feel misunderstood when returning to civilian society. Have you had any experiences like that? What happened, how did you deal with the situation?
3. Veterans sometimes wonder whether college really prepares them for a career. Do you agree or disagree with this statement? Why?
4. Is there anything else you would like to share?

Appendix C: Definition of Terms

Acculturation: The change in individuals whose primary learning has been in one culture and who take over traits from another culture. (Berry, 2003)

Acculturative Stress: The impact of psychological adjustment to a new culture, generally observed in immigrant and ethnic minority communities (Mena, Padilla, & Maldonado, 1987). Acculturative stress has been found to be associated with a myriad negative health outcomes, including increased risk for mental health problems and substance abuse among adolescents and young adults (Walker et al., 2008).

Adaptation: The process of increasing the level of fitness of people to meet the demands of a new cultural environment, and its deal with how sojourners or new immigrants experience the distress caused by mismatches or incompatibility between the host culture and the culture of birth (Kim, 1998).

Adjustment: References the period of time when individuals begin to appreciate and respect their new culture and develop sensibility toward cultural differences (Chang, 1973; Morris, 1960).

Agentic: Ability to plan and act but have less capacity for ability to feel emotion.

Career Decision-Making Self-Efficacy: an individual's belief about his or her capability to perform tasks related to the career decision-making process (Bullock-Yowell, Andrews, & Buzzetta, 2011, p.400)

Career Decision-Making Difficulty: a deviation from the model of the person that makes career decisions perfectly. Gati, Krausz, & Osipow's (1996) taxonomy of difficulties includes three major categories: lack of readiness, lack of information about, and inconsistent information.

Career Maturity: level of knowledge of the world of work, self-knowledge, occupational knowledge, career decision-making ability, career planning ability, and career implementation ability (Liptak, 2008).

College Readiness: The level of preparation a student needs to enroll and succeed (without remediation) in a credit-bearing general education course within an undergraduate program at a postsecondary institution. Successful completion includes proficient completion of entry-level courses that makes it possible to complete subsequent sequence courses.

College Success: Completing a postsecondary degree, a two-year degree in three years, or a four-year degree in six years (also see: Normal Time).

Latent Variable: A variable that cannot be measured directly, but rather a concept that is estimated.

Marginalization: The loss of cultural and psychological contact with one's original ethnic group as well as the dominant group. Feelings of alienation, confusion, and loss of identity accompany this mode of acculturation, often resulting in poorer mental health than those who experience integration (Berry, 1990).

Military Installation: A base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a military department or, in the case of an activity in a foreign country, under the operational control of the Secretary of a military department or Secretary of Defense.

Non-traditional Students: Students meeting one of seven characteristics - delayed enrollment in postsecondary; attends college part-time; works full time; is financially independent for financial aid purposes; has dependents other than a spouse; is a single parent; or does not have a high school diploma (Pelletier, 2010).

Normal Time: The time necessary for a student to complete all requirements for a degree or certificate according to an institution's catalog. This is typically 4-years (8 semesters or trimesters, or 12 quarters, excluding summer terms) for a bachelor's degree, 2-years (4 semesters or trimesters, or 6 quarters, excluding summer terms) for an associate's degree (NCES, 2020). Remedial Gap: Percent difference of required enrollment in remedial coursework between two student groups.

Self-Identity: System of self-concepts (all roles a person plays)

Separation: The preservation of one's original ethnic culture and self-imposed withdrawal from the dominant society as a result (Berry, 1990).

Stereotype: Attribute or trait based on categories that are applied to a group of people due to certain beliefs about the members of that group (Koch et al., 2015).

Success Identity: Exhibit belief that an individual possesses the skills to adapt effectively to changing life circumstances and perceive potentially threatening situations as challenges to overcome rather than barriers to be avoided (Bandura, 1986; Glasser, 1984).

Veteran: A person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable (Public Law 114-38).

Transitioning Veteran: Those who have recently departed from military service. There are various measurements of time for those who are considered transitioning. For the purposes of this study, five years have been selected. This should capture most individuals who have left the military and are likely to currently be enrolled in college.

Gulf War-II Era Veteran: Those who had served in the Armed Forces sometime since September 2001 and returned to civilian life. Gulf War-II refers to conflicts in Iraq and Afghanistan.

First Generation College Student: college students from families where neither parent has more than a high-school education (Rendon, Hope, & Associates, 1996).

Appendix D: Organizational Structure Examples

Figure 2

Military Organizational Chart

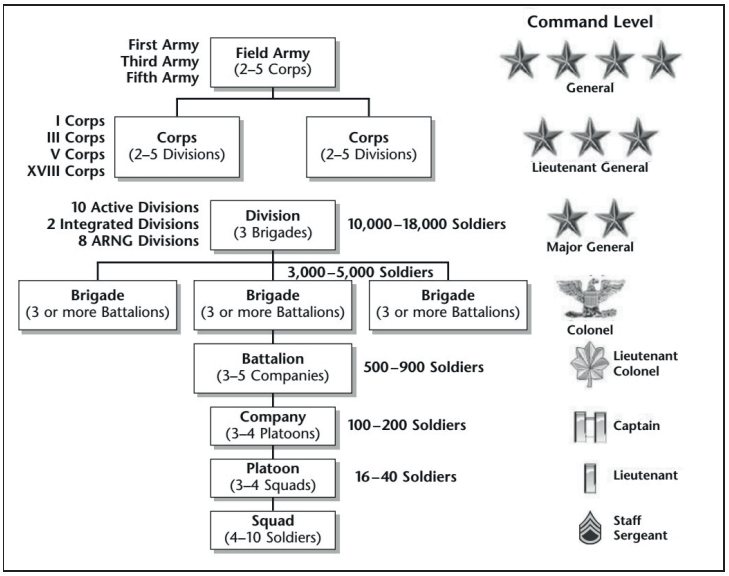
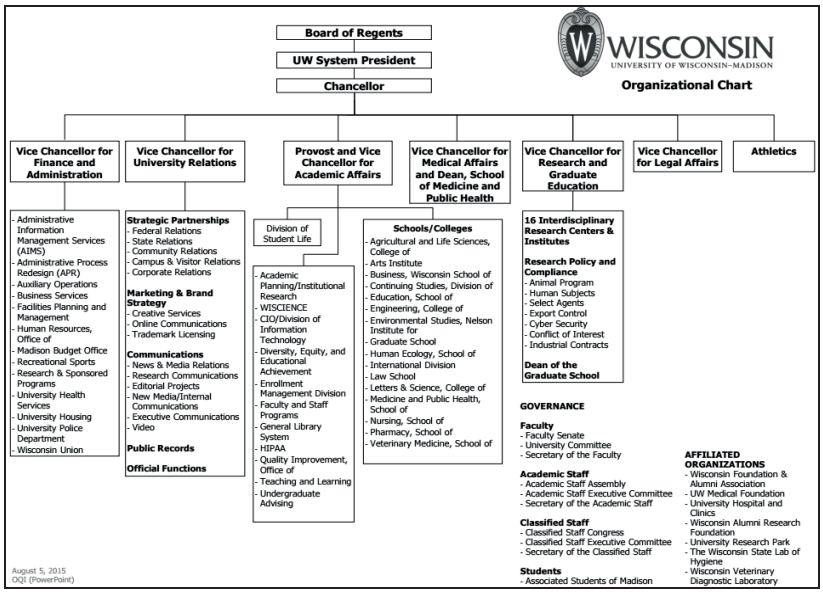
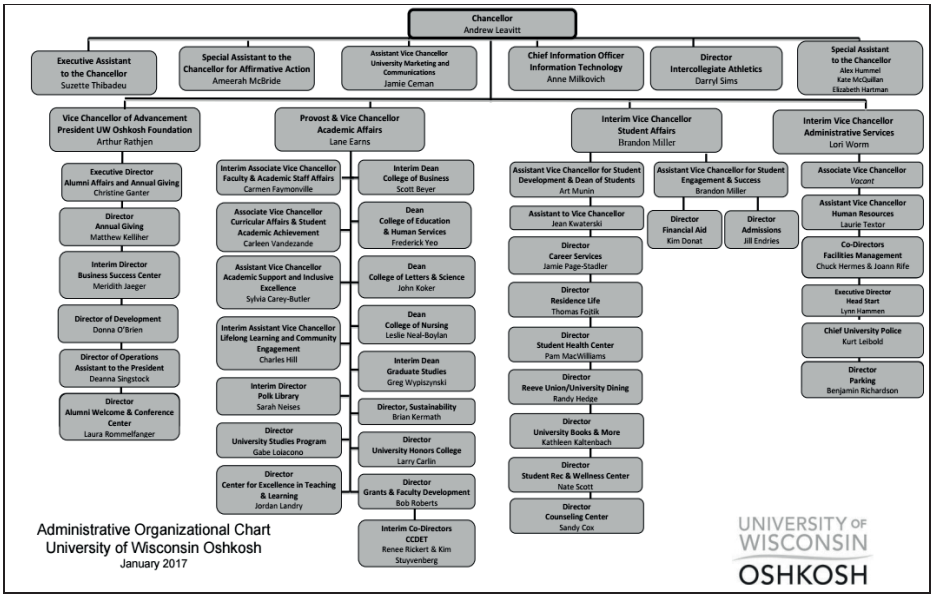


Figure 3

University Organizational Charts




Chancellor
Andrew Leavitt
Executive Assistant to the Chancellor
Suzette Thibadeu
Special Assistant to the Chancellor for Affirmative Action
Ameerah McBride
Assistant Vice Chancellor University Marketing and Communications
Jamie Ceman
Chief Information Officer Information Technology
Anne Milkovich
Director Intercollegiate Athletics
Darryl Sims
Special Assistant to the Chancellor
Alex Hummel
Kate McQuillan
Elizabeth Hartman
Vice Chancellor of Advancement President UW Oshkosh Foundation
Arthur Rathjen
Executive Director Alumni Affairs and Annual Giving
Christine Ganter
Director Annual Giving
Matthew Kelliher
Interim Director Business Success Center
Meridith Jaeger
Director of Development
Donna O'Brien
Director of Operations Assistant to the President
Deanna Singstock
Director Alumni Welcome & Conference Center
Laura Rommelfanger
Provost & Vice Chancellor Academic Affairs
Lane Earns
Interim Associate Vice Chancellor Faculty & Academic Staff Affairs
Carmen Faymonville
Associate Vice Chancellor Curricular Affairs & Student Academic Achievement
Carleen Vandezande
Assistant Vice Chancellor Academic Support and Inclusive Excellence
Sylvia Carey-Butler
Interim Assistant Vice Chancellor Lifelong Learning and Community Engagement
Charles Hill
Interim Director Polk Library
Sarah Neises
Director University Studies Program
Gabe Loiacono
Director Center for Excellence in Teaching & Learning
Jordan Landry
Interim Dean College of Business
Scott Beyer
Dean College of Education & Human Services
Frederick Yeo
Dean College of Letters & Science
John Koker
Dean College of Nursing
Leslie Neal-Boylan
Interim Dean Graduate Studies
Greg Wypijszynski
Director, Sustainability
Brian Kermath
Director University Honors College
Larry Carlin
Director Grants & Faculty Development
Bob Roberts
Interim Co-Directors CCDET
Renee Rickert & Kim Stuyvenberg
Interim Vice Chancellor Student Affairs
Brandon Miller
Assistant Vice Chancellor for Student Development & Dean of Students
Art Munin
Assistant to Vice Chancellor
Jean Kwaterski
Director Career Services
Jamie Page-Stadler
Director Residence Life
Thomas Foltik
Director Student Health Center
Pam MacWilliams
Director Reeve Union/University Dining
Randy Hedge
Director University Books & More
Kathleen Kaltenbach
Director Student Rec & Wellness Center
Nate Scott
Director Counseling Center
Sandy Cox
Assistant Vice Chancellor for Student Engagement & Success
Brandon Miller
Director Financial Aid
Kim Donat
Director Admissions
Jill Endries
Interim Vice Chancellor Administrative Services
Lori Worm
Associate Vice Chancellor
Vacant
Assistant Vice Chancellor Human Resources
Laurie Textor
Co-Directors Facilities Management
Chuck Hermes & Joann Rife
Executive Director Head Start
Lynn Hammen
Chief University Police
Kurt Leibold
Director Parking
Benjamin Richardson
Administrative Organizational Chart
University of Wisconsin Oshkosh
January 2017
UNIVERSITY OF WISCONSIN
OSHKOSH

Appendix E: Student Veteran Outcome Measures

Table 2

Remedial Enrollment Data

First-time Degree-Seeking Undergraduate Veterans Enrolled in Remedial Courses						
	Fall 2014		**Fall 2013**		**Fall 2012**	
Note. Massachusetts Department of Higher Education	**Enrolled**	**% Enrolled in at Least One Remedial Course**	**Enrolled**	**% Enrolled in at Least One Remedial Course**	**Enrolled**	**% Enrolled in at Least One Remedial Course**
University of Massachusetts	27	7.4 percent	18	11.1 percent	26	11.5 percent
State Universities	53	17.0 percent	63	17.5 percent	49	16.3 percent
Community Colleges	302	58.3 percent	388	55.2 percent	489	64.4 percent
Overall Average	**382**	**49.0 percent**	**469**	**48.4 percent**	**564**	**57.8 percent**

All First-time Degree-seeking Undergraduates Enrolled in Remedial Courses						
	Fall 2014		**Fall 2013**		**Fall 2012**	
Note. From Massachusetts Department of Higher Education	**Enrolled**	**% Enrolled in at Least One Remedial Course**	**Enrolled**	**% Enrolled in at Least One Remedial Course**	**Enrolled**	**% Enrolled in at Least One Remedial Course**
University of Massachusetts	9,415	3.3 percent	9,262	4.6 percent	9,016	6.1 percent
State Universities	7,241	20.8 percent	7,212	21.4 percent	6,883	21.5 percent

Community Colleges	18,911	58.2 percent	20,225	60.4 percent	20,284	60.2 percent
Overall Average	**35,567**	**36.0 percent**	**36,699**	**38.7 percent**	**36,183**	**39.3 percent**
Remediation Gap		**13.0 percent**		**9.7 percent**		**18.5 percent**
Source: From Massachusetts Department of Higher Education, 2015						

Table 4

Fall-to-Fall Retention Comparison

Fall-to Fall Retention Rate of Veterans Enrolled as First-Time Degree-Seeking Undergraduates			
	Fall 2013	**Fall 2012**	**Fall 2011**
	Percent Enrolling in Postsecondary Education in Fall 2014***	Percent Enrolling in Postsecondary Education in Fall 2013***	Percent Enrolling in Postsecondary Education in Fall 2012
University of Massachusetts	67 percent (N=18)	69.2 percent (N=26)	78.6 percent (N=14)
State Universities	63 percent (N=63)	91.8 percent (N=49)	84.4 percent (N=45)
Community Colleges	49 percent (N=385)	62.7 percent (N=483)	59 percent (N=334)
Overall Retention	**52 percent (N=466)**	**65.6 percent (N=558)**	**62.6 percent (N=393)**
Fall-to-Fall Retention Rates of All First-time Degree-Seeking Undergraduates			
	Fall 2013 Cohort	**Fall 2012 Cohort**	**Fall 2011 Cohort**
	Percent Enrolling in Postsecondary Education in Fall 2014**	Percent Enrolling in Postsecondary Education in Fall 2013**	Percent Enrolling in Postsecondary Education in Fall 2012
University of Massachusetts	89.5 percent (N=9,262)	69.2 percent (N=9,016)	78.6 percent (N=9,098)
State Universities	88.0 percent (N=7,212)	91.3 percent (N=6,883)	90.1 percent (N=6,946)

Community Colleges	58.8 percent (N=20,052)	61.4 percent (N=20,133)	60.6 percent (N=20,212)
Overall Retention	**72.3 percent (N=36,526)**	**75.2 percent (N=36,032)**	**74.5 percent (N=36,256)**
Retention Gap	**20.3 percent**	**9.6 percent**	**11.9 percent**

Source: From Massachusetts Department of Higher Education, 2015
** Enrolled in the following fall includes enrollment at any institution, not just original

Table 3.1

Fall-to-Fall Female Retention Comparison

Fall-to Fall Retention Rate of First-time, Degree-seeking, Undergraduate Female Veterans			
	Fall 2013	**Fall 2012**	**Fall 2011**
	Percent Enrolling in Postsecondary Education in Fall 2014***	Percent Enrolling in Postsecondary Education in Fall 2013***	Percent Enrolling in Postsecondary Education in Fall 2012
University of Massachusetts	100 percent (N=7)	85.7 percent (N=7)	100 percent (N=3)
State Universities	72.0 percent (N=25)	100 percent (N=20)	100 percent (N=9)
Community Colleges	49.2 percent (N=59)	62.6 percent (N=91)	61.0 percent (N=59)
Overall Retention	**59.3 percent (N=91)**	**70.3 percent (N=118)**	**67.6 percent (N=71)**
Fall-to-Fall Retention Rates of First-time, Degree-Seeking, Undergraduate Females			
	Fall 2013 Cohort	**Fall 2012 Cohort**	**Fall 2011 Cohort**
	Percent Enrolling in Postsecondary Education in Fall 2014**	Percent Enrolling in Postsecondary Education in Fall 2013**	Percent Enrolling in Postsecondary Education in Fall 2012
University of Massachusetts	91.1 percent (N=4,267)	95.6 percent (N=4,215)	95.0 percent (N=4,321)
State Universities	89.2 percent (N=4,235)	93.0 percent (N=4,006)	91.9 percent (N=4,079)

Community Colleges	60.9 percent (N=10,379)	62.7 percent (N=10,495)	62.7 percent (N=10,510)
Overall Retention	**74.0 percent (N=18,881)**	**76.6 percent (N=18,716)**	**76.4 percent (N=18,910)**
Retention Gap	**14.7 percent**	**6.3 percent**	**6.8 percent**

Source: From Massachusetts Department of Higher Education, 2015
** Enrolled in the following fall includes enrollment at any institution

Table 3.2

Fall-to-Fall Male Retention Comparison

Fall-to Fall Retention Rate of First-time, Degree-seeking, Undergraduate Male Veterans			
	Fall 2013	**Fall 2012**	**Fall 2011**
	Percent Enrolling in Postsecondary Education in Fall 2014***	Percent Enrolling in Postsecondary Education in Fall 2013***	Percent Enrolling in Postsecondary Education in Fall 2012
University of Massachusetts	45.5 percent (N=11)	63.2 percent (N=19)	72.7 percent (N=11)
State Universities	57.9 percent (N=38)	86.2 percent (N=29)	80.6 percent (N=36)
Community Colleges	49.1 percent(N=326)	62.8 percent(N=392)	58.6 percent (N=273)
Overall Retention	**49.9 percent (N=375)**	**64.3 percent (N=440)**	**61.6 percent (N=320)**
Fall-to-Fall Retention Rates of First-time, Degree-Seeking, Undergraduate Males			
	Fall 2013 Cohort	**Fall 2012 Cohort**	**Fall 2011 Cohort**
	Percent Enrolling in Postsecondary Education in Fall 2014**	Percent Enrolling in Postsecondary Education in Fall 2013**	Percent Enrolling in Postsecondary Education in Fall 2012

University of Massachusetts	88.3 percent (N=4,993)	92.3 percent (N=4,797)	91.8 percent (N=4,777)
State Universities	86.3 percent (N=2,975)	89.1 percent (N=2,869)	87.6 percent (N=2,866)
Community Colleges	56.5 percent (N=9,605)	60.0 percent (N=9,591)	58.3 percent (N=9,654)
Overall Retention	**70.6 percent (N=17,573)**	**73.8 percent (N=17,257)**	**72.4 percent (N=17,297)**
Retention Gap	**20.3 percent**	**9.6 percent**	**11.9 percent**

Source: From Massachusetts Department of Higher Education, 2015
** Enrolled in the following fall includes enrollment at any institution

Table 4

Enrollment in Community College

Percent of Public Institution Undergraduate Veterans Enrolled in Community Colleges			
	Fall 2013	**Fall 2012**	**Fall 2011**
Community Colleges	83 percent (N=385)	85 percent (N=483)	86 percent (N=334)
Percent of All Public Institution Undergraduates Enrolled in Community Colleges			
Community Colleges	55 percent (N=20,052)	56 percent (N=20,133)	56 percent (N=20,212)
Enrollment Gap	**28 percent**	**29 percent**	**30 percent**

Source: Massachusetts Department of Higher Education, 2015

Table 5

Credit Completion Comparison

Credit Completion by Undergraduate Degree-seeking Veterans			
	Fall 2013	**Fall 2012**	**Fall 2011**
	Percent of Registered Credits Completed	Percent of Registered Credits Completed	Percent of Registered Credits Completed
State Universities	85.5 percent	87.0 percent	87.1 percent
Community Colleges	74.0 percent	74.5 percent	75.2 percent
Total	**77.3 percent (N=3,742)**	**77.8 percent (N=3,727)**	**78.6 percent (N=2,993)**
Credit Completion by All Undergraduate Degree-seeking Students			
	Fall 2013	**Fall 2012**	**Fall 2011**
	Percent of Registered Credits Completed*	Percent of Registered Credits Completed*	Percent of Registered Credits Completed*
State Universities	90.0 percent	90.6 percent	89.4 percent
Community Colleges	77.5 percent	76.9 percent	76.5 percent
Total	**82.6 percent (N=128,320)**	**82.4 percent (N=127,682)**	**81.7 percent (N=126,602)**
Completion Gap	**5.3 percent**	**4.6 percent**	**3.1 percent**

Source: From Massachusetts Department of Higher Education, 2015
*This equals the completed credits over registered credits of the fall terms noted.

Table 6

Community College Certificate and Degree Completion

Top Three Certificate and Associate's Degrees Earned by Undergraduate Veterans by CIP*				
Certificates	**3-Year Total**	**2014**	**2013**	**2012**
51. Health Professions	95	35	33	27
43. Homeland Security, Law Enforcement	47	17	17	13
15. Engineering Technologies	30	12	12	6
Share of Certificates Earned**				
51. Health Professions	2.1 percent	2.1 percent	2.2 percent	1.8 percent
43. Homeland Security, Law Enforcement	7.2 percent	7.0 percent	8.1 percent	6.5 percent
15. Engineering Technologies	5.1 percent	6.2 percent	6.3 percent	2.9 percent
Associate's Degrees				
43. Homeland Security, Law Enforcement	329	116	114	99
24. Liberal Arts	324	122	104	98
51. Health Professions	179	67	50	62
Share of Associate's Degrees Earned**				
43. Homeland Security, Law Enforcement	11.3 percent	11.9 percent	11.7 percent	10.4 percent
24. Liberal Arts	3.3 percent	3.5 percent	3.1 percent	3.1 percent
51. Health Professions	2.9 percent	3.1 percent	2.5 percent	3.1 percent

Source: Massachusetts Department of Higher Education, 2015
*CIP stands for Classification of Instructional Program. These are Dept of Education codes which are used to categorize higher education programs and align with Dept of Labor occupational codes (SOC).
**The percentage of certificates and associate's degrees earned by veterans students divided by all students.

Table 6.1

Veterans STEM Certificate and Degrees Earned

Degrees and Certificates Earned by Veterans Within STEM PROGRAMS					
		Fiscal Year			
Segment	**Degree Level**	**2012**	**2013**	**2014**	**3 Year Total**
University of Massachusetts	Certificate (0-1 Year)			*	*
	Associate				
	Bachelor	15	19	29	63
	Post-Bacc. Certificate	*	*	*	*
	Master	*	*	*	13
	Doctoral	*		*	*
University of Massachusetts Total		**21**	**24**	**38**	**83**
State Universities	Certificate (0-1 Year)				
	Bachelor	5	19	32	56
	Master			*	*
State Universities Total		5	19	33	57
Community Colleges	Certificate (0-1 Year)	13	20	29	62
	Certificate (1-2 Years)				
	Associate	44	56	65	165
Community Colleges Total		**57**	**76**	**94**	**227**
System	Certificate (0-1 Year)	13	20	30	63
	Certificate (1-2 Years)				
	Associate	44	56	65	165
	Bachelor	20	38	61	119
	Post-Bacc. Certificate	*	*	*	*
	Master	*	*	6	14
	Doctoral	*		*	*
System Total		**83**	**119**	**165**	**367**

Source: Massachusetts Department of Higher Education, 2015

Table 6.2

Veterans Share of All STEM Certificates and Degrees

Veterans Share of all Certificates and Degrees Earned Within STEM Programs					
		Fiscal Year			
Segment	**Degree Level**	**2012**	**2013**	**2014**	**3 Year Total**
University of Massachusetts	Certificate (0-1 Year)			1.2%	0.4%
	Associate				
	Bachelor	0.6%	0.8%	1.0%	0.8%
	Post-Bacc. Certificate	1.4%	1.4%	0.9%	1.2%
	Master	0.6%	0.6%	0.6%	0.6%
	Doctoral	0.5%		0.8%	0.4%
University of Massachusetts Total		**0.6%**	**0.7%**	**0.9%**	**0.7%**
State Universities	Certificate (0-1 Year)				
	Bachelor	0.6%	2.1%	3.4%	2.1%
	Master			1.6%	0.5%
State Universities Total		**0.6%**	**1.9%**	**3.3%**	**2.0%**
Community Colleges	Certificate (0-1 Year)	3.4%	4.8%	6.0%	4.8%
	Certificate (1-2 Years)				
	Associate	4.2%	4.7%	5.1%	4.7%
Community Colleges Total		**4.0%**	**4.7%**	**5.3%**	**4.7%**
System	Certificate (0-1 Year)	2.7%	3.9%	5.2%	4.0%
	Certificate (1-2 Years)				
	Associate	4.1%	4.6%	5.0%	4.6%
	Bachelor	0.6%	1.1%	1.6%	1.2%
	Post-Bacc. Certificate	1.4%	1.4%	0.9%	1.2%
	Master	0.5%	0.6%	0.7%	0.6%
	Doctoral	0.5%		0.8%	0.4%
System Total		**1.4%**	**1.9%**	**2.4%**	**2.0%**

Source: Massachusetts Department of Higher Education, 2015

Appendix F: Reliability Analysis

Veteran-2-Civilian Acculturation Stress Inventory Scale: Cronbach's α = 0.924

Item	Cronbach's α If item dropped
Q11	0.919
Q12	0.920
Q13	0.922
Q14	0.921
Q16	0.923
Q17	0.920
Q18	0.922
Q19	0.921
Q20	0.920
Q21	0.917
Q22	0.920
Q23	0.920
Q24	0.919
Q25	0.917
Q26	0.919
Q27	0.922
Q28	0.921
Q29	0.922
Q38	0.922
Q39	0.923

Vocational Identity Measure Cronbach's α = 0.961

Item	Cronbach's α If item dropped
Q69	0.959
Q70	0.958
Q71	0.962
Q72	0.961
Q73	0.959
Q74	0.959
Q75	0.960
Q76	0.959
Q77	0.959
Q78	0.958
Q79 [a]	0.960
Q80	0.959
Q81	0.960
Q82	0.958
Q83 [a]	0.960
Q84	0.959
Q85	0.961
Q86	0.960
Q87	0.959
Q88	0.958

a: reverse scaled item

Practical Education Satisfaction Cronbach's α = 0.901

Item	Cronbach's α If item dropped
Q31 [a]	0.890
Q32 [a]	0.889
Q33 [a]	0.891
Q34	0.887
Q35	0.886
Q36	0.885
Q37 [a]	0.893
Q38	0.899
Q39	0.906
Q40	0.893
Q41 [a]	0.889

a: reverse scaled item

College Commitment Cronbach's α = 0.924

Item	Cronbach's α If item dropped
Q43	0.918
Q44 [a]	0.913
Q45 [a]	0.916
Q46	0.920
Q47	0.917
Q48 [a]	0.913
Q49 [a]	0.919
Q50	0.915
Q51 [a]	0.916
Q52	0.918
Q53	0.923
Q54	0.916
Q55 [a]	0.925

a: reverse scaled item

College Belongingness α = 0.854

Item	Cronbach's α If item dropped
Q57	0.841
Q58	0.839
Q59 [a]	0.847
Q60	0.844
Q61	0.835
Q62 [a]	0.851
Q63	0.848
Q64	0.844
Q65	0.838
Q66	0.839
Q67	0.840

a: reverse scaled item

Appendix G: Correlation Matrix of Scales

Correlation Matrix

		Practical Education Satisfaction	College Belongingness	Vocational Identity Measure	College Commitment	Acculturation Stress Inventory
Practical Education Satisfaction	Pearson's r	—				
	p-value	—				
College Belongingness	Pearson's r	0.729	—			
	p-value	<.001	—			
Vocational Identity Measure	Pearson's r	0.365	0.395	—		
	p-value	<.001	<.001	—		
College Commitment	Pearson's r	0.643	0.561	0.322	—	
	p-value	<.001	<.001	<.001	—	
Acculturation Stress Inventory	Pearson's r	-0.372	-0.438	-0.337	-0.086	—
	p-value	<.001	<.001	<.001	0.276	—

Appendix H: Formal Approvals

376 HALE STREET
BEVERLY, MA 01915
(978) 927-0585 • ENDICOTT.EDU

DATE:	March 28, 2021
TO:	Michael Smith, MA
FROM:	Endicott College Institutional Review Board
PROJECT TITLE:	[1722161-1] Acculturation and Career Development Needs of Undergraduate Military Veterans
REFERENCE #:	
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
APPROVAL DATE:	March 28, 2021
EXPIRATION DATE:	
REVIEW TYPE:	Expedited Review
ONE CONDITION:	Please add Endicott's advisor and IRB information to the disclosure statement along with your information for contact

Thank you for your submission of New Project materials for this project. The Endicott College Institutional Review Board has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Expedited Review based on the applicable federal regulation.

Please note that any revision to previously approved materials must be approved by this committee prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others (UPIRSOs) and SERIOUS and UNEXPECTED adverse events must be reported promptly to this office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact irb@endicott.edu. Please include your project title and reference number in all correspondence with this committee.

AUSTIN COMMUNITY COLLEGE DISTRICT

Office of Institutional Research and Analytics

5930 Middle Fiskville Road • Austin, Texas 78752-4390 • Phone 512/223-7036

Austin Community College
Institutional Research Review Committee
Letter of Agreement

DATE: June 28, 2021

TO: Michael Smith
W7750 R&W Townline Road,
Whitewater, WI 53190

FROM: Jenna Cullinane Hege, Ph.D.

The Institutional Research Review Committee of Austin Community College considers your proposal "Acculturation and Career Development Needs of Undergraduate Military Veterans" to be of minimal risk to the participants, and to be exempt from further review based on Code of Federal Regulations PART 46—PROTECTION OF HUMAN SUBJECTS (46.104 Exempt research).

Best wishes on the success of your research!

Sincerely,

Jennifer Cullinane Hege — June 29, 2021

Jenna Cullinane Hege, Ph.D. — Date
Chair, ACC Institutional Research Review Committee
Vice President, Office of Institutional Research and Analytics

Hello Michael,

Thank You again for being so patient on this!

The Education Committee did agree to allow dissemination to the NAVPA member schools. Be advised that this is a posting to basically school certifying officials only and it will be up to each school to follow their own campus policies and procedur gain approval to allow their students to participate in your research study. Any participation agreements as well as any clarification and guidance will need to be between you and the member schools directly.

I have copied the NAVPA membership chairperson and our Public Relations Chairperson to determine if the survey link and guidance should be sent as a direct mail to our member schools or if posting to the Listserve is preferred.

Please let me know if you need anything further from me on this.

Best,

Teresa

Teresa Harris

2020-21 Education Committee Co-Chair

Purdue University, West Lafayette , IN 47906

education@navpa.org

cell: 765-404-9922

Appendix I: Future Research Proposal Abstracts

This appendix contains a list of recommended future research studies based on the findings of this study. The purpose of developing these future research proposals is to offer readers coherent, clear, and compelling justification of the need for the studies to be performed.

Research Proposal #1: Civilian Social Support for Veterans

Evidence indicates that social support can mitigate effects of acculturation stress (Kim, 2018; Lashari, Kaur, & Awang Hashim, 2018; Yoshida et al., 2020). Lack of social support is an early indicator of negative physical and mental health outcomes (Green, King, & Fischer, 2019; Harandi, Taghinasab, & Nayeri, 2017; Wang et al., 2018). While it is known that veterans experience acculturation stress (Smith, 2021), it is not known how social support impacts acculturation stress of veterans in their return to civilian society.

Research Design

RQ: To what extent and in what ways does civilian social support impact acculturation stress outcomes of veterans?

Null Hypothesis: Levels of civilian social support will have no impact on veterans' physical or mental health conditions.

Hypothesis: Levels of civilian social support will impact veterans' physical and mental health conditions.

The research question and hypothesis are best addressed through a quantitative research design using binary logistic regression analysis of sampled results. The research question was designed to identify the relationship between the independent variable of health conditions and independent variables of acculturation stress and social support.

Instruments

Veteran-to-Civilian Acculturation Stress Inventory (V2CASI)

Military culture differs substantially from that of civilian culture. Acculturation stress is the impact of psychological adjustment of veterans adjusting back to civilian culture. Acculturation stress has been found to be associated with negative health outcomes, including increased risk for mental health problems and substance abuse (Mena, Padilla, & Maldonado, 1987; Walker et al., 2008). The V2CASI measures acculturation stress across four factors: work challenges, intercultural relations, discrimination, and cultural isolation (Smith, 2021).

Social Support Questionnaire (SSQ)

Social support questionnaire measures the number of social supports and satisfaction with social supports available to individuals. The SSQ, a reliable instrument, is more strongly related to positive than negative life changes, has a negative correlation with psychological discomfort, and enables an individual to persist at tasks under frustrating conditions (Corkin, R., 1997; Kamran, F. & Ershadi, K., 2000; Wang, H., 1998).

Self-Rated Health Questions

The questions, “How would you rate your overall physical health?” (Excellent - 5 to Poor - 1). And “How would you rate your overall mental health?” (Excellent - 5 to Poor - 1). A review of literature finds this self-rated health question to be predictive of both morbidity and mortality (Baum, 1999; Cervantes et al., 1990; Idler, E. & Benyamini, Y., 1997).

Preliminary Implications

It is well documented that military veterans struggle with physical and mental health when returning to civilian society. Currently, the common assumption is that post-traumatic stress disorder (PTSD) is the cause of veterans mental health conditions. This study seeks to understand whether or not acculturation stress also impacts veterans physical and mental health, as well as what role civilian social support plays. The results of this study may offer significantly important new understanding of veterans and interventions that would better support their return to civilian society.

Research Proposal #2: National Study of Student Veteran postsecondary Success: postsecondary program vocational-relevance and program completion

New evidence uncovers the critical importance of practical education satisfaction for undergraduate military veterans (Smith, 2021). Practical education satisfaction is a strong predictor of commitment to college, a predictor of persistence (Allen et al., 2008; Garriott, Navarro & Flores, 2017; Hackman, J. R., & Dysinger, 1970; Savage et al., 2019). It is known that student veterans struggle to persist at the same rate as their non-veteran peers. It is not known what factors might impact program completion.

Research Design

RQ: To what extent does practical education satisfaction impact postsecondary program completion for student veterans?

Null Hypothesis: Student veterans have difficulty completing postsecondary programs, but their difficulty is not connected to vocational-relevance of the training/education.

Hypothesis: Student veterans have difficulty completing postsecondary programs, in part because they do not believe the programs are vocationally-relevant.

To address this research question, national data sets capturing postsecondary program enrollment and completions is required to track veterans persistence and completion. This data set is merged with responses to quantitative practical education satisfaction (PES) scale. A blending of secondary analysis with the PES allows for correlation of postsecondary program completion with veterans' practical education satisfaction.

Instruments and Data Sets

The Practical Education Satisfaction (PES) scale measures students' perception of the vocational utility of their academic program. The PES 11-item scale has high inter-item consistency (α = .901) and correlates with College Commitment Scale (R= .643) (Smith, 2021). Blending PES responses with IPES enrollment and completion surveys allows for tracking postsecondary program progress and completion. For student veterans enrolled in 2-year degree programs, they would be requested to complete the PES in the spring term of the first academic year and be tracked for the subsequent 2.5-years. For student veterans enrolled in 4-year degree programs, they would be requested to complete the PES in the spring term of their first academic year and be tracked for the subsequent 5.5-years.

Preliminary Implications

Undergraduate veterans are struggling to complete postsecondary programs at the same rate as their non-veteran peers, which has long-reaching and lasting implications. The results of this study may lead to increased understanding of factors impacting veterans' postsecondary success, which in turn can create improved interventions.

Research Proposal #3: Reverse Mentorship's Impact on Student Veterans

Student veterans experience difficulty in higher education in general and lag behind their peers in completion of Science, Technology, Engineering, and Mathematics (STEM) related postsecondary programs (Smith, 2021). There is a lack of research regarding student veterans' struggle in STEM programs and courses, including a gap in understanding veterans experiences with faculty and instructors. A recent study found it common for veterans to perceive their professors as out of touch with the real world (Smith, 2021). This may speak to a larger cultural disconnect between professors and student veterans. Literature finds that reverse mentorship can positively impact both students and professors (Incantalupo et al., 2014; Lin & Lin, 2016; Preston et al., 2015). Reverse mentorship may positively impact veterans' perception of feeling valued as well as their engagement with faculty members and instructors.

RQ: How does reverse mentorship impact relationships between undergraduate veterans and faculty members?

Null Hypothesis: Reverse mentorship will have no effect on the relationship between undergraduate veterans and faculty members.

Hypothesis: Reverse mentorship positively impacts the relationship between undergraduate veterans and faculty members.

Instruments and Data Sets

This qualitative study will collect data via observation and group interview sessions with faculty and students. Thematic coding of recorded interview sessions will focus on themes associated with interview questions pertaining to veterans' perceptions of faculty and faculties' perceptions of veterans.

Preliminary Implications

It is common for veterans to enroll in higher education as a means of re-entry back into civilian society. Undergraduate veterans carry with them a military culture of strict hierarchy, which may preclude them from engaging with faculty members. Reverse mentorship may reduce stereotypes that faculty members carry of military and veterans, due to increased awareness of their culture. It may also increase veterans' sense of belonging in their degree programs as well as engagement with faculty members.

Research Proposal #4: Cultural Purgatory: Veterans' Acculturation Strategy Selection and Outcomes

It is unknown which acculturation strategy veterans tend to select when re-entering civilian society. Acculturation strategies can have significant and lasting implications on individuals, thus it is critical to better understand which strategies are selected and if these strategies are predictors of outcomes. Acculturation research highlights a sense of adriftness between two cultural worlds of international students and immigrants (Caplan, 2007; Cespedes & Huey, 2008; Finch & Vega, 1999). Berry's (1994, 1997) acculturation strategy models include four strategies selected by individuals when engaging with a new culture: integration, seperation, assimilation, and marginalization. Marginalization, one of the four strategies, leads to loss of identity which often results in poorer mental health than those who experience integration (Berry, 1990).

RQ: To what extent and in what ways does acculturation strategy impact academic outcomes of student veterans?

Sub-question 1: Which acculturation strategy do veterans select?

Null Hypothesis: Acculturation strategies selected by veterans will have no impact on their academic outcomes.

Hypothesis: Acculturation strategies selected by veterans will have an impact on their academic outcomes.

Instruments and Data Sets

Similar to the Revised Acculturation Rating Scale for Mexican Americans (ARSMA-II), an instrument will be created and validated to capture the acculturation strategy taken by student veterans (Jimenez et al., 2011). This measure will identify which of the four acculturation strategies veterans have selected. These results will be matched with academic outcomes responses which include: GPA, academic program selected, persistence, and completion. Ideally, these data could be verified through the National Student Clearinghouse (NSC).

Preliminary Implications

If acculturation strategy does impact academic outcomes of veterans, this evidence would offer the opportunity to develop interventions to empower student veterans with information on which strategies have positive outcomes as well as offer tools and strategies to support selection of strategies associated with positive academic outcomes.

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Research Proposal #1

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Appendix J: Dissertation Brief

This dissertation brief is a one-page summary handout given to attendees of my dissertation defense. The purpose of this brief is to offer a clear and concise summary of my work which can be useful for busy executives and policy makers.

Research Question[1]:

To what extent do perceptions of civilian acculturation, vocational identity, sense of belonging, and satisfaction with practical education impact the college commitment of undergraduate veterans?

Summary of Findings[1]:

- Practical Education Satisfaction is a significant factor (R=.643) for undergraduate veterans commitment to college.
- Clearer Vocational Identity leads to increased Practical Education Satisfaction, which increases College Commitment. Vocational Identity and College Commitment are retention predictors.
- Acculturation stress (R=.438) negatively impacts College Belongingness of veterans, which impacts post-secondary program persistence.
- Most veterans experience acculturation stress while attending college.
- More committed and less stressed veterans are enrolled at 4-year institutions.
- Veterans enrolled at 4-year institutions express more positive experiences than those at 2-year institutions.

Policy/Practice Implications[1]**:**

- Include veteran in required demographic data for more robust analysis (IPEDS and state longitudinal data systems).
- Ensure post-secondary programs have practical application (Accreditation/Quality Assurance/Interventions)
- Mandate stereotype training to reduce bias associated with Veteran status.
- Create open-enrollment policy at public 4-year institutions for veterans.
- Require civilian career counseling at an earlier stage of military career, prior to transition.
- Implement bias training to reduce discrimination and stereotypes of student veterans.

Methodology[1]:

- Quantitative research: 75-item questionnaire (N=170) and open-ended qualitative statements
- Linear Multiple Regression (LMR), Path Modeled Analysis, T-Test, and Contingency Table.

Future Research Needed[1]:

- Longitudinal study: “Cultural Purgatory”, To what extent does acculturation strategy impact outcomes of student veterans?
- Longitudinal Study: To what extent and in what ways does social support impact acculturation

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stress outcomes of veterans?

- National Study: To what extent does practical education satisfaction impact degree/program completion?
- Longitudinal Intervention Study: To what extent does early stage pre-decision civilian career counseling impact veterans after military service?
- To what extent does reverse mentorship impact relationships between undergraduate veterans and faculty members?
- Comparative mixed-methods study: What is the cultural distance between military veteran culture and civilian societal culture? How do military veterans respond to cultural distance differences?
- Mixed-Methods study: To what extent and in what ways does acculturation stress impact health outcomes of veterans while enrolled in post-secondary degree programs?
- Follow-up Study: To what extent does acculturation stress impact experiences of veterans at 2-year and 4-year institutions.

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Resume/CV

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Qualifications

10+ Years: Leadership
7+ Years: Project Management
7+ Years: Research & Assessment
4+ Years: Teaching Experience

Education

Ed.D. Educational Leadership

Endicott College, Boston, MA

2013 - 2021 (08/2021 Defense)

Master's, Leadership & Administration

TUI, Cypress, CA

2007-2009

Bachelor's of Science, Education

Taylor University, Fort Wayne, IN

2000-2004

References

Jeff Robishaw, VP/CIO at GTC
262-564-3676

Julie Bryant, VP at Ruffalo-Noel Levitz
319-247-4735

Joe Fullington, Director at Froedtert
262-945-2932

Personal Accomplishments

Ultramarathons: 20+ (100K, 50M, 50K)

Boston Marathon: 2x (2:55 PR)

Volunteering: Yellowstone National Park, 2011-2016 Ice Age Trail Alliance, 2016 - Present

Endurance Running Coach, UESCA 2018-Present

Army Commendation Medal- Bravery

I Am

Recognized as a critical thinker, skilled communicator, and high achiever. A complex problem-solver with aptitude to connect the big picture to the fine details. A champion of collaboration, elevating cross-functional teamwork towards corporate and organizational leadership. Confident and experienced engaging with C-Suite and stakeholders at all organizational levels. A U.S. Army veteran (culturally competent, strong interpersonal skills, and team-oriented).

Relevant Professional Experience

Institutional Research Director, Gateway Technical College 2017-Present

- Lead strategic and operational planning for institution-wide data management.
- Managed customer service, employer, and continuous improvement research projects.
- Managed development, distribution, and maintenance of Tableau dashboards.
- Accountable for Institutional data quality projects, including Federal audit operational budget submissions encompassing $132+ Million.
- Supervision, training, and evaluation of research staff (4).
- Accountable for multi-campus research ethics and data literacy training.
- Analysis of Local, Regional, and National economic trends, identifying strategic advantages and opportunities.
- Championed analysis focused on improving organizational diversity, equity, and inclusion through transparency.
- Institutional representative at regional, state, and national conferences.

Policy and Strategic Planning Analyst, UW-Whitewater 2016-2017

- Key member of the university strategic planning council, recommending data-driven improvements.
- Develop, analyze, and visualize organizational quantitative surveys to enhance operations.
- Lead cross-functional qualitative and quantitative research projects.
- Acted as lead project manager for both internal and external stakeholders, integral in ensuring compliance, process efficiency, and project satisfaction.
- Led cross-functional research projects focused on improving organizational objectives through identification of high impact practices.
- Developed and presented research briefs to C-suite.

Associate Director/Adjunct, Suffolk University 2010 - 2016

- Successful Federal grant request for proposal (RFP), securing $2.5 Million award.
- Conduct assessment and evaluation of continuing education programming
- Develop effective data collection and management strategies to effectively capture and utilize data to inform program practices
- Developed curriculum for 10-week, non-credit courses in mathematics, composition, and career development
- Management of professional staff (3), faculty (3), graduate interns (2), and student workers (2).