Factors Salient to Career Decision Making of University Student Veterans

Josef E. Mogharreban

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Kurt Johnson, Chair
Deborah Kartin
Carolyn Baylor

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Abstract

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Josef E. Mogharreban

Chair of the Supervisory Committee:
Professor Kurt Johnson
Department of Rehabilitation Medicine

Background: For many college students, identifying a path toward a career is an important step in their lives. For student veterans, the process of choosing a career after military service may be complicated by a myriad of contextual and environmental factors, including disability.

Objective: Three research questions guided this study: 1) What factors related to military service do student veterans perceive as being associated with their career decision-making self-efficacy; 2) What resources are student veterans using to support their educational and career development; and 3) For those student veterans who identify as having a service-connected disability, what impact do they perceive their experience of disability has, if any, on their self-efficacy with respect to career decision-making?

Methods: This study was conducted in two phases. Phase I involved 13 individual interviews of student veterans to elicit the experiences of service members enrolled in college most salient to addressing the research questions. Interviewees in Phase I were asked specifically about the ways

in which their experiences related to the academic and career decisions they made upon separating from military service as well as the types of questions needed the better understand the career development processes of a larger sample of student veterans. Data obtained in Phase I helped inform development of a survey used in Phase II of this inquiry. In Phase II, 127 veterans from six different universities completed the online survey. Respondents in Phase II were also asked to complete the Career Decision Self-Efficacy – Short Form (CDSE).

Results: Interviewees identified a range of experiences, resources, and variables as being important in their academic and career decision-making. A total of 20 questions were derived from the interviews and subsequent analysis. Survey respondents in Phase II reported high levels of confidence in preforming tasks necessary in making educational and career decisions. No significant differences were found with respect to disability status, combat exposure, or military rank. Participants in both Phases reported relying on family and friends and utilizing their own abilities to independently research academic and career interests using the internet. For participants with disabilities, although efficacious in their career decision-making, identified feeling their career decisions were constrained or influenced by their disability experience.

Limitations: The CDSE variables explored are only a few of the variety of factors which could have been studied. Additionally, the sample size was limited.

Conclusions: The student veterans in this study, in general, felt confident in and motivated by their ability to engage in behaviors necessary to make career decisions after military service and have the skills and initiative to identify other professional career-related resources, including college faculty, when needed. Exposure to combat, disability, or military rank do not appear to significantly affect CDSE scores. Qualitatively, these variables contribute to career decisions. Future studies would benefit from using enhanced recruitment strategies to increase sample size.

Plain Language Summary

Study Title: Factors Salient to Career Decision-Making of Military Veterans Enrolled in College

Author: Josef Mogharreban

Why is understanding the experience of student veterans important?

Student Veterans, like most students, have much to consider when choosing a career. Unlike other students, these individuals may face unique medical, social, and occupational challenges. For some veterans, the transition from solider to civilian can complicate future career plans. Education, for many veterans, represents the fastest route to good jobs after military service. Identifying the areas student veterans see as being most important to their confidence in choosing a career, will help universities best serve their academic and career needs.

What did the researchers want to know?

This study focused on how veterans make decisions about their college education and career choice and what influence their military experience, including service-connected disability, had on their decisions. The researchers also wanted to know what resources student veterans used to help in their academic and career decision-making.

What did the researchers do?

Researchers interviewed student veterans and used the information from the interviews to develop a survey that asked the veterans about the factors and experiences that influenced their career decisions once they left the military. The survey was used to find out how confident student veterans were in making career decisions.

What did researchers find?

No differences were found between a person's military rank, their disability, or whether they had been in combat, and their confidence in making career decisions. Participants used a wide range of career resources, however, they preferred to talk to family and friends and look up information on the internet more than talking to career professionals. Participants with disabilities were very confident in making career decisions but said that their disability was considered when making these decisions.

What are the key takeaways from these research results?

Student veterans are confident in making decisions about their future careers. They had mature attitudes towards making career decisions and were able to find the information they needed to help them in making these decisions. Student veterans with disabilities were also confident in making career decisions, although some said they had additional challenges related to their disabilities which limited planning for their future and career opportunities.

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Chapter 1: Introduction

This study is an investigation into the impact that military service and/or service-connected disability has on self-efficacy with regard to career decision-making of military veterans choosing to attend college. Veterans who served on active duty in the United States Armed Forces at any time since September 2001, referred to as Gulf War-era II veterans, are enrolling in colleges and universities at the highest rate since World War II, a trend that continues today (Cook & Kim, 2009; Sander, 2012). As veterans of the longest war the United States has fought, these individuals represent a diverse group of individuals with a wide range of experiences and needs (Sayer, Carlson, Frazier, 2014; Green & Hayden, 2013). As military members leave uniformed service and attempt to re-enter civilian environments, those entering post-secondary institutions may face challenges related to successfully navigating educational and career planning and, ultimately, obtaining gainful employment (Sayer, Carlson, & Frazier, 2014). Although the minority, many of these military members return to civilian roles with service-connected disabilities which may further complicate their transition from military to civilian life (Wheeler, 2012; Green & Hayden, 2013). Despite the drive and discipline military service instills, difficulty adapting to campus life, especially as it relates to academic and career decision-making, may be difficult. This difficulty may be most acutely felt when the skills gained in service have only marginal transferability or obvious civilian counterpart and/or when adjusting to a newly acquired disability (Elliott, Gonzalez, & Larsen, 2011; DiRamio, Ackerman, & Mitchell, 2008). Often these veterans must identify a new career path, compounding the difficulties inherent to their reintegration (Clemens & Milson, 2008; Rudstam, Strobel, Gowar, & Cook, 2012; Gravley, 2012).

Congress has passed several laws aimed at supporting veterans of recent conflicts in their transition out of military service. A variety of mechanisms are used, including competitive transitional support grants targeting various populations through application processes that are awarded either individually or to organizations (e.g. Veterans Workforce Investment Program (VWIP)). Many of these programs specifically target veterans with service-connected disabilities and most of these benefits are supported and maintained by the Veterans Administration (VA). These programs include, but are not limited to, the post-9/11 GI Bill, the Vocational Rehabilitation and Employment (VR&E), Reserve Educational Assistance (REAP); Survivors & Dependents Assistance (DEA); Veterans Educational Assistance Program (VEAP); Veterans Retraining Assistance Program (VRAP); Educational Assistance Test Program; National Call to Service Program; and Transition Assistance Program (TAP) (Department of Veterans Affairs, 2015). Currently, no guidelines exist at the national or state levels for the kinds of services veterans need in transitioning across educational institutions, although recommendations for guidelines can be found in the research literature (Elliott, Gonzalez, & Larsen, 2011; Rumann & Hamrick, 2010; Madaus, Miller, & Vance, 2009; Chruch, 2009; Parks & Walker, 2014; Burnett & Segoria, 2009; Shackelford, 2009; DiRamio, Ackerman, & Mitchell, 2008). As a result, veterans traversing new academic environments, are also expected to navigate complicated bureaucracies which control the various benefits for which they may be entitled and need in order to optimize their successful transition to civilian life.

Former service members are also expected to engage effectively in social contexts that culturally differ from those they are leaving. Unfortunately, many veterans are still finding themselves ill equipped to cope with their shifting identities, changes in family dynamics, independent decision-making, pain management, and changes in emotional and cognitive

abilities, as well as social and environmental factors, regardless of direct exposure to combat, adding to a confusing and frustrating transitional experiences (Church, 2009; Summerall, 2007; Green & Hayden, 2013; DiRamio & Spires, 2009; Tanielian & Jaycox, 2008).

Approximately 4.1 million individuals have served during Gulf War-era II (Department of Labor, 2018). Thanks in large part to the New GI Bill, many are choosing to pursue post-secondary education. As of 2014, the Department of Veterans Affairs (VA) estimates more than one million Gulf War-era II veterans are accessing educational benefits to attend college (Department of Veterans Affairs, 2016). In addition to providing a strong recruitment incentive, the New GI Bill has made attending higher education a possibility for an unprecedented number of veterans (Bell, Boland, Dudgeon, & Johnson, 2013). However, for those who qualify, benefits expire after 36 months and may be subject to termination depending on academic performance (U.S. Department of Veterans Affairs, 2016). For individuals whose: 1) Military Occupational Specialty (MOS) does not directly transfer into the civilian sector (i.e. combat-related) 2) disability impedes their ability to return to a specific job, or 3) for those who struggle to identify or access appropriate academic and career-related resources, additional challenges are met in choosing a new career path or fully adjusting to the rigorous academic environment before their benefit expires. Taken together, these issues may influence an individual's self-efficacy, one's belief that he or she can successfully complete a task, with respect to his or her academic and career development and thus impact the kinds of career decisions veterans make.

Employment rates for all veterans have increased in recent years, especially for those with a bachelor's degree or higher (Department of Labor, 2018). Among Gulf War-era II veterans age 25 and older, employment rates for those with a bachelor's degree are estimated to be as high as 86.3% compared to all non-veterans age 25 years and older, similarly educated, at

80.6%. Veterans with service-connected disability serving during Gulf War-era II, nearly three in ten of all returning service members, reported having slightly lower employment rates (75.8 %) than those without service-connected disability (85.5 %) (United States Department of Labor, 2018). Educational attainment appears to equalize the opportunity for veterans and age-matched civilians in terms of employment; however, little is known about the impact of experiences in the service and/or with service-connected disability on educational planning and career choice.

Many researchers have concluded that gainful employment is a critical component of the successful reintegration of service members into civilian life (Phillips, Braud, Andrews, & Bullock 2007; Ruh, Spicer, & Vaughn, 2009; Tanielian & Jaycox, 2008). Further, many service members separate from the military after ten years (either by choice or administratively) and, depending on when they entered service, may only be in their twenties or thirties, at the peak of their vocational productivity and too young to retire (Segal & Segal, 2004). Although securing jobs or careers after the military is a priority for many veterans, they may be out of sync with educational and career development processes relative to their non-veteran peers (Clemons & Milsom, 2008; Simpson & Armstrong, 2009). A social and economic cost-benefit analysis would suggest that because employment for veterans is associated with a reduction in rates of homelessness, incarceration, addiction and relapse, domestic abuse, and suicide (Perl, 2015; Tanielian & Jaycox, 2008; Bullock, Braud, Andrews, & Phillips, 2009), policies and practices to increase rates of employment are in the best interest of the United States. Employment is also correlated with a myriad of psychosocial benefits including increasing one's ability to effectively cope with stress, increasing socialization and the ability to relate to others, enhancing an individual's self-esteem, and promoting self-sufficiency (Wehman, Targett, West, & Kregel, 2005). Chronic unemployment and financial difficulties, on the other hand, have been found to

increase negative mental health symptomology, providing further evidence of the potential correlations between unemployment and negative mental health consequences (Riviere, Kendall-Robbins, McGurk, Castro, & Hoge, 2011).

1.1 Adapting to Disability

Service members injured in combat in Iraq and Afghanistan since September 2001 have survived catastrophic injuries due to advances in evaluation, emergency field medicine, coagulants, and body armor as well as rapid evacuation of the wounded to hospital facilities (Sayer, et al. 2014; Uomoto & Williams, 2009; Frain, Bishop, & Bethel, 2010). Injuries sustained are varied and include a range of physical and emotional trauma. Some of the more common injuries and diseases include amputations, brain injury, Post-Traumatic Stress, blindness, burns, multi-organ system damage, hypertension, increases in depression and anxiety, and difficulties with impulse control and irritability (Church, 2009; Madaus & Miller, 2009; DoD, 2016).

Given the numerous support needs, many resources and considerable administrative assistance are allocated toward veterans' transition to civilian life. Service members with service-connected disabilities may receive even higher levels of support depending on the program in which they are enrolled, such as the Vocational Rehabilitation and Employment (VR&E) benefit (Collins et al, 2014; Department of Veterans Affairs, 2015). Despite these services, many veterans continue to struggle to readjust across many life domains including vocational, educational, and social (Resnik, Plow, and Jette, 2009; Green & Hayden, 2013; Elliott, Gonzales, & Larsen, 2011; Hayden, Ledwith, Dong, & Buzzetta, 2014). In a survey conducted by The Pew Research Center, 1,853 veterans were queried about their transition from military service to civilian life. A majority of those surveyed (72%) reported an easy time

readjusting to civilian life, but 27% reported having difficulty adjusting (Morin, 2011). Sayer et al. (2010), when surveying veterans using VA healthcare, estimated that as many as 41% experience some-to-extreme difficulty keeping a job, completing tasks at home, work, and school after deployment. Post-Traumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI), described as the "signature wounds" of Gulf War-era II due to their prevalence among service members at time of discharge, are often co-morbid. Neurodegenerative disorders have also been associated with TBI, suggesting that the neurocognitive status of some veterans may deteriorate over time, potentially exacerbating many of these issues for years to come (Sundin et al., 2010; Sayer et al, 2014; Veitch, Friedl, & Weiner, 2013). Additionally, veterans screening positive for PTSD, who were accessing the VA, were five times more likely to report problems finding or keeping a job than those who screened negative (Sayer et al., 2010).

In a review of 29 studies, it was found that as many as 31% of returning service members will meet the criteria for PTSD within a year after deployment, the third most common psychiatric diagnosis among veterans utilizing the VA, and 19% will have been diagnosed as having a traumatic brain injury (Ralevski, Olivera-Figueroa, & Petrakis, 2014; Madaus & Miller, 2009). Those with service-connected PTSD and/or TBI have been associated with higher rates of somatic symptoms (e.g., pain and fatigue), and poor coping mechanisms such as binge drinking, drug abuse, and other high-risk behaviors, all of which may adversely affect academic outcomes for student veterans (Bullock, Braud, Andrews, & Phillips, 2009; Barry, Whiteman, & Wadworth, 2014). Further, recent studies suggest symptoms of both PTSD and depression decrease an individual's tolerance for crowded spaces, including large lecture halls, and increase the likelihood he or she will feel unfairly judged by peers and faculty, as well as, feeling they do

not fit in on campus and may have less self-efficacy than peers (Elliott, Gonzalez, & Larsen, 2011).

1.2 Theoretical Orientation

Self-efficacy, an individual's belief that he or she can successfully complete a given task, has been identified as a primary factor influencing career decision-making. Several researchers have theorized that one's perceptions of one's own capabilities play important roles in influencing behavioral choices, performance, persistence, and the ability to focus on long-term educational and career goals, particularly for at-risk, non-traditional college students, such as veterans (Bandura, 1997; Betz & Hackett, 2006; Lent et al., 1994; Elliott, 2015; Elliott, Gonzalez, & Larsen, 2012; Taylor & Betz, 1983; Betz, Klein, & Taylor, 1996; Peterson & delMas 1996). Individuals with low self-efficacy may also be less inclined to seek support services, academic or otherwise, further affecting their ability to assimilate into college environments (Gianakos, 2001; Church, 2009). Self-efficacy, then, is a critical component to understanding and potentially mitigating deleterious effects of transitional problems, including career development faced by this population (Lent, Brown, & Hackett, 1994).

Due to its emphasis on self-efficacy and holistic perspectives on factors involved in career choice, as well as its demonstrated utility in examining career decision-making processes, social cognitive career theory (SCCT) (Lent, Brown, & Hackett, 1994, 2002 Albert & Luzzo, 1999; Ali & McWhirter, 2006; Chartrand & Rose, 1996) has been selected as a theoretical orientation for this study. According to SCCT, in the context of post-secondary education, those who have the highest self-efficacy and thus most likely to succeed are those who have developed the requisite academic skills (i.e., studying, test-taking) and confidence (i.e., social encouragement, past accomplishments), and have models (i.e. observations, peer or familial

exposure to academia). These skills lead to taking on, rather than avoiding, difficult academic tasks even when faced with occasional adversity (Bandura, 1986; Brown, Tramayne, Hoxha, Telander, Fan, and Lent, 2008). By extending the conceptual framework of SCCT to student veterans, it is expected that difficulties will arise during the transition from military service to civilian educational contexts. The countless social and personal factors, including but not limited to perceived stigma, individual environment, ethnic identity, disability-related barriers and experiences, peer and familial support, as well as emotional resilience, all may influence the career decision-making process for student veterans (Lindley, 2006; Gloria & Hurd, 1999; Mazurek & Shoemaker, 1997).

Self-Efficacy Theory

Lent (2005) defined self-efficacy as "a dynamic set of beliefs that are linked to particular performance domains and activities" (p. 104). In Albert Bandura's (1977) social cognitive theory, self-efficacy was defined as the degree to which one believes or has confidence that one can successfully complete a task leading to an outcome. People with higher levels of self-efficacy are predicted to achieve their goals in a specified domain. Conversely, people tend to avoid situations or actions they perceive to exceed their capacity or where they have lower levels of confidence (Bandura, 1977). In social cognitive theory Bandura further posits that the more positive, successful experiences an individual has, the more efficacious he or she becomes. This increase in self-efficacy and perceived self-confidence is often then generalized to new situations. Repeated failures, however, result in lower self-efficacy and, potentially avoidant behaviors, and decrease the likelihood of persistence (Bandura, 1977). In this way, self-efficacy has been postulated to be a significant contributor to behavior and behavior change (Bandura, 1977). Self-efficacy has been studied in relation to a wide variety of behaviors, including

vocational development (Lent & Brown, 2006; Lent, Brown, & Hackett, 1994; Hackett & Betz, 1981). Social cognitive career theory, born out of research applying principles of Bandura's self-efficacy theory specifically to career decision-making, includes a conceptual framework to explain three segmental, yet interlocking, processes answering the questions: 1) how do career and academic interests develop; 2) how are educational and career choices made; and 3) how are career-related performances achieved?

Career Decision-Making Self-Efficacy

Developed by applying Bandura's (1977) self-efficacy theory to career decision-making, in Career-Decision Self-Efficacy (CDMSE) an individual's belief in their ability to complete the requisite task(s) is presumed to have an impact on career decisions (Taylor & Betz, 1983). CDMSE was initially used to help explain gender differences in career decision-making behaviors. In a seminal study, Betz & Hackett (1981), found that women with high scientific aptitudes limited their career choices by avoiding traditionally male dominated professions in math and science. This study established the first correlation between self-efficacy expectations and career interests and empirically demonstrated that confidence was a better predictor of behavioral outcome than ability. Since then a positive relationship between high scores on CDMSE's has been found with adaptive career decision-making behaviors including active engagement in career exploration activities (Blustein, 1989), career decidedness (Taylor & Popma, 1990), vocational identity (Robins, 1985), and career maturity (Luzzo, 1993) among high school students (Gati & Saka, 2001), college students (Taylor & Betz, 1983), and students with disabilities (Luzzo, Hitchings, Retish, & Shoemaker, 1999). In a study of CDMSE among college students with and without disabilities, those without disabilities reported higher levels of CDMSE than both students with learning and non-learning disabilities (Luzzo, Hitching, Retish,

& Shoemaker, 1999). Multiple researchers have also associated higher levels of CDMSE with academic persistence and performance (Brown, Tramayne, Hoxha, Telander, Fan, Lent, 2008; Multon, Brown, & Lent, 1991; Peterson & delMas, 1996; Restubog, Florentino, & Garcia, 2010). Furthermore, in a study of college students, Chung (2002) found that those with higher CDMSE were more committed to career planning and goal setting. Understanding self-efficacy of student veterans with regard to career decision-making could provide insight into the factors that promote or inhibit self-efficacy and improve readiness for academic and career development in this population.

Recent scholarship regarding post 9/11 student veterans, including analysis of national survey data and qualitative interviews, has focused primarily on challenges this generation of veterans' face as they transition from military service into higher education. Despite considerable evidence of and potential utility in understanding academic performance and persistence of college students, virtually no studies exist in peer reviewed literature specifically targeting career decision self-efficacy of military veterans (Betz & Hackett, 2006). In a literature review regarding career concerns of veterans, Simpson & Armstrong, (2009) found most of the published literature focused primarily on psychosocial concerns, often emphasizing and addressing needs of veterans with specific disabilities, not how these concerns specifically translate into self-efficacy or career decision-making. For example, in an unpublished dissertation, Owen (2012) found increasing career decision-making self-efficacy (CDMSE) in veterans with Attention Deficit Hyperactivity Disorder (ADHD) may improve vocational adjustment. In another unpublished dissertation, Gravley (2012), using a strictly quantitative research design, found high self-efficacy related to veterans' confidence with career decision-making, especially for those whose military career aligned with their future career plans.

Recommendations in both literature reviews and unpublished doctoral dissertations indicate the need for research regarding additional subsets of the student veteran population including those with a much wider array of disabilities and the need for research using qualitative methodologies. This study represents a critical step toward addressing the methodological limitations in the existing body of research.

1.3 Purpose of the study

The purpose of this study was to examine the perspectives of veterans with and without service-connected disabilities, currently enrolled in university, on factors salient to their career decision-making self-efficacy. Given the natural overlap between academic and career development processes, decisions about educational planning were considered to be part of career decision-making (Arbona, 2000). Lent et al.'s (1994) Social Cognitive Career Theory (SCCT) provided a conceptual basis for the study as it has been shown to effectively examine the processes through which people make and pursue career choices (e.g., Albert & Luzzo, 1999; Ali & McWhirter, 2006; Chartrand & Rose, 1996). The SCCT, a model that can assist in understanding and predicting behavior, emphasizes the individual from a holistic perspective (i.e. the important effects of social and cognitive variables upon career choice processes). Consideration of how these factors influence behavior, including the confidence necessary to participate in educational planning toward specific career goals, helps identify and assess potential factors that may impede or facilitate one's ability to act upon a career choice (Restubog, Florentino, and Garcia, 2010; Sandler, 1998; Peterson and delMas, 1996).

Research questions

The following research questions were addressed in this study:

1. What factors related to military service do student veterans perceive as being associated with their career decision-making self-efficacy?
2. What resources are student veterans using to support their educational and career development?
3. For those student veterans who identify as having a service-connected disability, what impact do they perceive their experience of disability, if any, has on their self-efficacy with respect to career decision-making?

To address these research questions, data were collected in two phases, using both qualitative interviewing and a primarily quantitative web-based survey. In the qualitative phase, individual interviews were conducted to elicit the attitudes and opinions of student veterans with respect to the relationship between their experiences in the military, and for some their service-connected disability, and educational planning and career decision-making. Results of the qualitative phase of this study helped inform the development of the survey, which was used to gather information from a wider group of student veterans, with and without disabilities, about career decision-making and their perception of the influence of their military service and service-connected disability on that process. In addition to questions derived from the interviews, the Career Decision Self-Efficacy Scale (CDSE Scale; Betz, Hammond, & Multon, 2005; Betz & Klein, 1996) was also administered as part of the online survey. The CDSE Scale addresses participants perceived self-efficacy for completing the necessary tasks for making academic and career decisions (i.e., accurate self-appraisal, gathering occupational information, selecting goals, making plans for the future, and problem solving) (Betz & Hackett, 2006).

Significance

The results of this study contribute to the existing body of research by specifically addressing experiences and needs of student veterans with disabilities in their transition to post-secondary and career environments. Further, no study using SCCT has been conducted with student veterans using mixed methods. Analyzing both qualitative and quantitative data gleaned from this study simultaneously added greater depth to understanding the role of self-efficacy in career decision-making of this population than is possible using either method alone (Johnson & Onwuegbuzie, 2004; Creswell & Clark, 2011). Furthermore, understanding the lived experiences and influences military service and/or service-connected disability has on one's self-efficacy with respect to career decision-making of student veterans will fill an important gap in related literature (Luzzo, 1999; Rivera et al., 2007; Robertson, Miles, & Mallen, 2014).

Because work plays such an essential role throughout the majority of adult life and is a central component of one's identity and satisfaction across a range of life domains, understanding how career decisions are made by our veterans is critical. Given the lack of research regarding career decision-making processes of post-9/1l veterans entering college after military service, career counselors, university administrators, and other professionals who work with this population within and independent of academic settings are uniquely positioned to enhance their academic experiences, including their academic and career decision-making.

Synthesis

There is little evidence in the published literature regarding student veterans' perception of the impact military service has on self-efficacy with regard to career decisions. Even less evidence exists as to the impact of service-connected disability on educational and career planning. Post-secondary education has been found to be important in equalizing employment opportunities for veterans. Further, veterans with service-connected disabilities have been found

to be disadvantaged relative to their non-disabled peers with respect to employment. The results of this study inform student veterans, university counselors, and others with respect to pertinent variables to consider, in order to enhance student veterans' self-efficacy in career decision-making.

1.5 Definition of Terms

Career Decision Self-Efficacy: A person's self-belief in his or her ability to successfully complete academic and career related tasks that lead to effective career decisions (Taylor & Betz, 1983).

Career development: The total constellation of psychological, sociological, educational, physical, economic, and chance factors that combine to shape individual career behavior over the life span (Sears, 1982)

Career Maturity: Model of five career choice competencies necessary for mature career decision-making

Enlisted: The "backbone" of the armed services. Enlisted soldiers have specific specialties within their unit.

Military veteran: A person who served in the armed forces and is eligible to receive GI Bill benefits (Radford, 2009).

Noncommissioned Officer (NCO): Enlisted soldiers with specific skills and duties such as training, recruiting, tech or military policing.

Nontraditional Student: As distinct from "traditional students", that is, students who not are typically between the ages of 18-23, a first-time enrollee, right out of high school, living on campus, attending full time, and in many cases having a family member paying for their enrollment (Bryan, 2016).

Self-efficacy: A person's expectations of his or her ability to successfully complete a given task. Self-efficacy is postulated to be a major mediator of behavior and behavior change (Bandura, 1977).

Service member: Military service members include military personnel on active duty, in the reserves, or in the National Guard. (Radford, 2009)

Student veteran: Former members of the armed services currently enrolled in higher education.

Service-connected disability: Veterans who are determined by Veterans Administration (VA) to be disabled by an injury or illness that was incurred or aggravated during active military service

Officer: Act as "managers" of enlisted soldiers. Trained to lead other soldiers in all situations. Must hold at least a bachelor's degree.

Post-9/11 GI Bill: The common term used to refer to the program authorized by the Post-9/11 Educational Assistance Act of 2008 (Title 38 U.S. code, Chapter 33). The Bill is a government program administered by the Veterans Administration which provides money to cover tuition and fees, a monthly housing allowance, and a stipend for books and supplies. Qualified individuals served in active duty status after September 11, 2001. The program began actively funding student veterans on August 1, 2009 (Radford, 2009).

Department of Veterans Affairs (VA): The Department of Veterans Affairs runs programs benefiting veterans and members of their families. It offers education opportunities and rehabilitation services and provides compensation payments for disabilities or death related to military service, home loan guaranties, pensions, burials, and health care that includes the services of nursing homes, clinics, and medical centers. (USA.gov)

Warrant officer: The technical experts in the armed services. They have specific technical or tactical specialties (e.g., helicopter pilots), and manage and maintain many of the Army's combat systems, vehicles and networks. (Goarmy.com)

Chapter 2: Literature Review

The impact of military service on our veterans, both positive and negative, is undeniable. For many, the end of military service and the subsequent changes to their life and sense of self can feel abrupt and overwhelming. The transition out of the military often requires a process of rediscovery as veterans navigate new opportunities for themselves and their families. Since entering the conflicts in Iraq and Afghanistan in 2001, referred to as Gulf War-era II (GWE-II), more than 2.8 million service members have transitioned from military service into civilian roles with more than five million more expected by 2020 (Elliott, Gonzales, & Larsen, 2011). While most veterans report little difficulty with regards to this transition, for veterans of Gulf War-era II, 44% report having difficulty re-entering civilian society. For those experiencing the added complexity of a service-connected disability, the readjustment can be even more difficult (Bagalman, 2013; Taylor, Morin, & Parker, 2011; Sayer et al., 2014). For those leaving military service, entering the labor force through employment and/or education seems to provide the quickest route to reintegrating back into civilian communities (Griffin & Stein, 2015). Navigating the complex demands of employment and academic environments can be daunting, especially for those with disabilities, with low socio-economic status, who live in rural settings, and/or who have limited education. Although many veterans are successful in their pursuit of employment or academic degrees following military service, the specific factors perceived by this generation of veterans as influencing their academic and career decision-making remains sparse in the literature (Ghosh & Fouad, 2016). Understanding these factors in the context of the many unique challenges transitioning veterans face will better equip university administrators and rehabilitation professionals, including those tasked with providing transition assistance to separating veterans, with the tools to better address the needs of this population.

This literature review will focus on characterizing military veterans of recent conflicts (i.e. those who have served since September 11, 2001), including those with disabilities, highlighting aspects of their experiences that add to both their unique status within our society as well as to the complexity of their academic and career decision-making. This review will also provide a historical background of career development and offer a theoretical framework useful in understanding career decision-making of veterans attending college.

2.1 Overview of the Contemporary Veteran

Since the attacks of the World Trade Center on September 11, 2001, an estimated 4.1 million individuals have served in the United Sates Armed Forces. Eighteen percent of those who served were women, a rate much higher than at any other point in history (BLS, 2018). These military members served in the three major military operations: Operations Enduring Freedom (OEF, Afghanistan, 2001), Iraqi Freedom (OIF, Iraq, 2003), and New Dawn (OND, Iraq, 2010), also known as Gulf War-era II (BLS, 2018). A significant percentage of these service members will have newly acquired service-connected disabilities (Sayer, Carlson, & Frazier, 2014).

As a result of advances in medicine and military technology, veterans are much more likely to survive catastrophic injuries which likely would have been fatal in previous wars. This increased survival rate has resulted in significant increases in disability (Madaus, Miller, & Vance, 2009; Frain, Bishop, & Bethel, 2010; Jackson, Thoman, Suris, & North, 2012). Over one million individuals (41%) who served in Gulf War-era II, reported having service-connected disabilities, almost double that of veterans of the first Gulf War (BLS, 2018). The complexity of these injuries adds to the uniquely different profile of this new generation of veterans (Veterans Health Administration [VHA], 2016).

Common injuries of GWE-II, often referred to as “signature wounds”, include traumatic brain injury (TBI), and Post-Traumatic Stress Disorder (PTSD) (Frain et al., 2010; Hyer, 2006; Ramchand et al., 2010; Sundin, Fear, Iversen, Rona, & Wessely, 2010). Complicating matters further, many veterans return with high rates of comorbidity, experiencing both injuries simultaneously (Yurgil, et al., 2014; Howlett & Stein, 2016). For example, 39-50% of Iraq and Afghanistan veterans with a probable history of mild traumatic brain injury (mTBI) are likely to have an identified diagnosis of PTSD and/or depression (Schneiderman, Braver, & Kang, 2008; Carlson, et al., 2010). In another study, of those who reported loss of consciousness, 43.9% developed PTSD, and of those who reported altered mental status, 27.3% developed PTSD. By contrast, in those with an injury without loss of consciousness or altered mental status, the rate of PTSD was 16.2%, and in those without an injury it was 9.1%. The relationship between TBI and PTSD remained significant after controlling for combat experiences (Hoge, et al., 2008). More recently, a prospective study of Marines who were assessed before and after deployment to Iraq and Afghanistan found that 56.8% of participants reported a history of pre-deployment TBI, while 19.8% sustained a deployment-related TBI (Yurgil, et al, 2014). Given the complexity, variability in manifestation, and high comorbidity of these injuries, deployment of management strategies by the Department of Defense (DOD) while service members are in uniform and (once separated) in outpatient environments provided by the Veterans Administration (VA) continues to be challenging (Howlett & Stein, 2016). Research in this area suggests that veterans with service-connected disabilities will likely require lengthy periods of recovery, and a focus on collaborating treatment efforts to better monitor interactions between interventions (Corrigan & Cole, 2008; French & Parkinson, 2008).

2.2 Signature Wounds

Traumatic Brain Injury (TBI)

A traumatic brain injury (TBI) can be defined as an alteration in brain function, or other evidence of brain pathology, caused by an external force (Menon, Schwab, Wright and Maas, 2010). The leading cause of death and disability among all young people, TBI has been found to affect thinking and reasoning, attention and concentration, comprehension, language and communication ability, executive functioning, self-regulatory and metacognitive abilities, and social, emotional and behavioral functioning such as irritability and lack of impulse control (Kennedy & Coelho, 2005; Vance & Miller, 2009). These deficits have wide-ranging manifestations making TBI a particularly complex phenomenon (Helms & Libertz, 2014). The primary cause of all injuries of military members serving in Iraq results from the use of high-energy explosives with shrapnel, causing ultra-high velocity fragmentation injuries, often to the extremities, and blast related brain injuries. The most frequent mechanism of these injuries is the improvised explosive device (IED). Blast injuries, such as those resulting from IEDs, alter the cells' metabolism and result in cell death caused when the pressure created by the blast creates waves causing an instantaneous rise in atmospheric pressure much higher than normal for humans to withstand (CDC, 2006). This pressure specifically affects organs that are air or fluid-filled, such as the brain, even if there is no visible wound (Church, 2009). Explosive devices account for an estimated 40% of all the causalities in the current conflicts (Tanielian & Jaycox, 2008) and make brain traumas the most prevalent injuries of the current wars (Church, 2009). Between the years 2000-2016, 361,092 service men and women were medically diagnosed as having TBI (Defense and Veterans Brain Injury Center, at http://www.dvbic.org/dod-worldwide-numbers-tbi). It is estimated that approximately 19.5% of veterans deployed to Iraq and

Afghanistan were diagnosed with TBI (Tanielian & Jaycox, 2008). The total number of veterans who have experienced TBI is not known and is likely higher than the research suggests due to several factors. First, accurately diagnosing a TBI in combat zones, especially a mild TBI (mTBI), is inherently difficult given limitations in diagnostic specificity, prevalence of inaccurate descriptions, and lack of witnesses to help corroborate the clinical picture (Tanielian & Jaycox, 2008). Further, not all veterans choose to access medical services through the VA, a primary source of available data on disability among veterans (Bagalman, 2013). In the case of mild TBI (mTBI), which accounts for most of the injuries, the injury may not be noticeable and thus, go unreported or treated (Bagalman, 2013). Other veterans may be concerned that disclosing such an injury would preclude them from military service, in either active or reserve units, or negatively impact future career plans (U.S. Government Accountability Office, 2008). Still others may fear any disclosure would further delay their ability to return home after being deployed to a war zone (Rand, 2008). Finally, cognitive impairment, such as TBI, may make navigating the complex medical systems necessary for care difficult for some and impossible for others (Lew, Tun, & Cifu, 2009).

In today's all-volunteer military, more service members than ever before have been deployed for multiple tours, increasing the risk of sustaining TBI and other combat-related traumas. Given the high operational tempo (i.e. multiple deployments and duration) of the recent conflicts and the needs of the unit potentially being valued greater than the needs of one service member, the full extent of the impact of these injuries on individuals may not be realized for months or years after returning from combat.

Not surprisingly, the diagnosis and related short and long-term manifestations of TBI (e.g. impairments to executive functioning) most often associated with the disability can have a

negative impact on learning, specifically the higher-level learning tasks (e.g., reading comprehension, memory, writing, studying, note-taking), which are necessary skills in post-secondary education (MacLennan & MacLennan, 2008; Gravely, 2012). Kennedy and her colleagues (2008) found memory problems were most prevalent among college students with TBI, including among those that had access to medical care through the Department of Veterans Affairs (VA). Further, they found that the academic difficulties of the students in their sample were compounded by struggles with organization and decision making, anger and depression, fatigue and headaches, increased test anxiety, forgetfulness, decreased ability to cope with workload, and student peers and faculty who may not understand TBI. Predictably, these issues increased the more severe the injury.

Post-Traumatic Stress Disorder (PTSD)

According to the most recent revision to the Diagnostic and Statistical Manual, 5th edition (American Psychological Association, 2015), the manual used by clinicians and researchers to diagnose and classify mental disorders, those experiencing PTSD must have been exposed to actual or threatened death, serious injury, or sexual violation that result from one or more of the following scenarios for more than one month and cause clinically significant distress or impairment in social, occupational, or other essential areas of functioning. The individual must have at least: a) directly experienced the traumatic event; b) witnessed the traumatic event in person; c) learned that the traumatic event that occurred to a close family member or close friend (with the actual or threatened death being either violent or accidental); or d) experienced first-hand repeated or extreme exposure to aversive details of the traumatic event (including military combat, rape, physical assault, natural disaster, and witnessing violence) (American Psychological Association, 2015; Breslau, 2012.). An individual can be diagnosed with PTSD at

any age with symptoms typically manifesting within the first three months of trauma, although such symptoms may not appear until months or years later. PTSD has been associated with myriad personal and interpersonal consequences including greater physical health problems such as pain, cardio-respiratory and gastrointestinal problems, intimate relationship problems including physical and/or psychological aggression towards one's spouse or loved one, and a reduction in social support including emotional numbing and detachment, increased hostility, poor problem solving, and a general distrust of others (Pacella et al., 2013; Taft, et al, 2011; Hoge et al., 2008; Dekel, Enoch, & Solomon, 2008).

Lifetime prevalence of PTSD in the United States is estimated to be around 6.8% (Howlett & Stein, 2016). By contrast, researchers conducting a meta-analysis of 33 studies found that as many as 23% of veterans of Iraq and Afghanistan may have PTSD when screened for the disorder upon returning from deployment (Fulton, et al, 2015). However, this number may be higher depending on data collection methodology. For example, McClernon, Calhoun, Hertzberg, Dedert, & Beckham (2013), used structured clinical interviews, considered the gold standard assessment methodology for psychiatric diagnosis, to assess PTSD prevalence in recent veterans across six VA facilities. They found the prevalence to be as much as 32% in veterans of their sample.

Another problematic characteristic of these conflicts that further separate them from past wars is the frequency of multiple deployments of our service members. Unfortunately, the likelihood of developing PTSD increases dramatically, to as much as 77% higher for service members with two deployments when compared to service members with only one (Reger, Gahm, Swanson, and Duma, 2009; Bass & Golding, 2012; Breslau, 2012). Veterans suffering with PTSD often experience unemployment, relationship issues, and aggressive behavior in

greater numbers than peers without PTSD in part because of the associated symptoms of the disorder (Stiglitz & Bilmes, 2008; Basham, 2008; Marshall, Panuzio, & Taft, 2005). Untreated or undertreated combat trauma, including PTSD, can easily manifest into conditions associated with a variety of negative physiological, psychological, and social outcomes for the individuals and their families and potentially undermine needed social support (Westwood et al., 2010; Ellliott, 2011). Complicating matters further, co-morbid conditions such as depression, substance abuse, and suicide are common among individuals experiencing such trauma (Brady, Back & Coffey, 2004).

Research suggests that stigmatization of mental illness (i.e. negative stereotypes toward individuals with psychiatric and psychological problems), including PTSD, pervades our society and may lead many veterans to be reluctant to disclose or seek treatment for their illness or disabling condition (Anderson & Carden-Coyne, 2007; Danish & Antonides, 2009). Negative perceptions of mental illness may be projected to all veterans and thus increase incidences of discrimination for veterans with or without disability (Stone & Stone, 2015; Kleykamp 2013). The fear that one would be considered weak for pursuing mental health services, viewed as potentially less productive in their work, and that such disclosure could, in the case of active duty members, result in significant negative consequences up to and including administrative separation, may persist for a veteran long after their service has ended (Tanielian, et al, 2008; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004).

Military culture, discussed in greater depth below, emphasizes secrecy, stoicism, denial, and physical and mental “toughness”. These attributes are essential to the success of both service members and, ultimately, the military itself. It follows, then, that veterans who deviate from basic requirements of military service, such as those who are experiencing disabilities, especially

invisible disabilities such as PTSD, may not readily self-identify as being disabled (Griffin & Stein, 2015). Such notions are supported empirically. A study of post 9/11 Army and Marine Corps veterans speculated members did not disclose disability for fear they would be perceived as weak (65%), treated differently by leadership (63%), or that others would have less confidence in them (59%), (Hoge et al., 2004). Findings such as these suggest the importance of considering and understanding military culture as an important factor in veterans academic and career decision-making.

2.3 Military Culture and Identity

The culture of the military, governed by laws, norms, traditions, and values, is diverse and must be understood as uniquely different from the civilian world (Hall, 2011; Coll, Weiss, Draves, & Dyer, 2012). Reger, Etherage, Reger, and Gahm (2008) state, "…to the extent that a culture includes a language, a code of manners, norms of behavior, belief systems, dress, and rituals, it is clear that the Army represents a unique cultural group" (p. 22). Further, as David Fenell (2008) pointed out, while there are "cultural, religious and ethnic diversity within the military, the military is a culture in its own right" (p. 8).

There are many facets of military culture important in understanding the issues faced by this population. From initial entry into military service, standards of conduct on how to think, communicate, and interact with others, as well as core values including courage, loyalty, and commitment are aggressively imposed (Exum & Coll, 2008). This "communal" way of thinking, one of the clearest characteristics of the organization, tends to extend to all aspects and stages of service members' lives, including their personal lives (Soeters, Winslow, & Weibull, 2006). These traits and ways of conduct often last far after one separates from a military environment. Additionally, the modern service member must contend with putting the mission ahead of his or

her family. This often includes the emotionality and stress associated with long and frequent separations from loved ones due to deployment. This constant preparation, and inherent risk to one's personal safety that characterizes the reality of service for many military members, are inherently different than most other professions and can cause tremendous emotional turmoil for the service member and their family.

Furthermore, the military has historically focused a disparate amount of attention and resources on training civilians to be soldiers than on training soldiers to be civilians. This "soldierization" process can be described as the purposeful attempt to deconstruct one's civilian status and, having been receptive to adopting new values, "rebuilding" that individual with a new military identity (Soeters, Winslow, & Weibull, 2006). Depending on the specific military branch and/or unit, this process may take between 8-12 weeks (Broadhurst, McNeill, Hendrix, Wright, & May, 2003). The effects of this acculturation however, are expected to last and become more internalized the longer one is retained in the military. By contrast, training to reenter civilian society after potentially a full career within this context is, at most, five to seven days (Department of Defense, 2016). Although one is expected to adapt quickly to their new civilian roles and culture, for most, the process is fluid and exists on a continuum whereby adjustment, adaption, and assimilation are actively and continuously pursued.

The acculturation process that veterans face may be further impeded by disability. Veterans may feel isolated due to the change in self-concept by being reduced from a valuable member of a strong military team to a single civilian; being physically separated from their assigned unit, as well as possibly being subject to administrative separation, can be devastating. Thus, formal disclosure (or even acknowledgement) of their disability for some individuals may be the single greatest challenge facing veterans transitioning into workplace and academic

environments (Madaus, Miller, and Vance, 2009). For example, more than 80% of student veterans with TBI report academic problems, yet less than 50% used campus disability services, which may suggest reluctance to seek help or tendency of this population to minimize or deny problems (Kennedy et al, 2008; Vance & Miller, 2009; Flashman & McAllister, 2002). The individual's level of military acculturation may exacerbate existing or perceived barriers to receiving help (Danish & Antonides, 2009).

Military Identity

Identity has been conceptualized as the experiences, societal role, group or unique characteristics that define an individual (Burke & Stets, 2009). In order to thrive in the context of the military, one is expected to quickly adopt the aggressive, male-dominated ethos, as well as the rituals and pride of belonging to a group (DiRamio & Jarvis, 2011). Additionally, the military adheres to a strict hierarchy that includes the incremental increase in responsibility, typically related to one's ascension up military ranks. An individual's rank, for many, represents years of hard work and dedication, sometimes earned under harsh conditions in austere environments at great personal sacrifice. For separating military members, leaving this rank structure behind can be difficult, constituting an immediate loss of one's identity (Litz & Orsillo, 2004; McDermott, 2007). For veterans with a newly acquired disability, this loss can be twofold: loss of identity as a military member and loss of identity as a person without disability. The process to "desoldierize" and reconcile these abrupt changes may be complicated by simultaneously needing to acculturate to a cultural environment drastically different than the one they are leaving - namely, college (ACE, 2009; Branker, 2009; DOD, 2010).

Student Veteran Identity

The extreme nature of returning veterans' experiences and the potential compounding effects of their chronic health conditions and often complex medication regimen, both licit and illicit, all contribute to unique characteristics that are neither shared by other students nor well understood on college campuses. Once separated from military service, veterans may experience several unique difficulties including: adjusting to changes in status and identity, searching for autonomy, and bridging the intentional gap between the military and civilian worldviews (Hall, 2008; Coll, Weiss, Draves, & Dyer, 2012). Research suggests that this disconnect between civilian and military culture, and the adoption of new identities, creates a crisis that further impedes one's ability to assimilate. The success of assimilating into this new context requires the ability to interact with others who are wholly different from one's military "family," and developing independent decision-making, which are skills that may not have been as necessary in the military where decision-making requires rule following as opposed to self-regulation (Demers, 2011; DiRamio & Jarvis, 2011).

The intersection of competing identities (i.e. parent, part-or-full time employee) can be challenging for most students. For student veterans, the addition of adjusting to newly acquired disability, one's rank, combat exposure, socioeconomic status and presence of academic experience before entering an academic environment adds to the complexity of identity formation (Rumann & Hamrick, 2010). Incorporating, and in some cases, reframing one's identities in the less regulated environment of college, relative to the structure of the military, may strongly influence how well or fully a student veteran is able to transition and commit to a new core identity (DiRamio & Jarvis, 2011).

2.4 Veterans in Transition

Transition can be defined as occurring when an "event or nonevent results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behavior and relationships" (Schlossberg, 1981, p.5). Transition can thus be thought of as being psychological, consisting of various processes whereby an individual accepts and learns to adapt to new situations (Bridges, 2009). The changes from life in the military community to life as a civilian are many and may include: relocation, loss of social support systems, the need to navigate different or nonexistent health care services, and possibly a new educational or vocational path. Many attempts to address and potentially mitigate the difficulties associated with these changes have been suggested, perhaps none as well-conceived or funded as higher education.

Servicemen's Readjustment Act of 1944

Signed into law by President Franklin D. Roosevelt on June 22, 1944 the GI Bill of Rights, as it is commonly referred, provided education and home loan benefits to service members returning from the War. Many veterans during this time entered classrooms and/or certification programs. In 1947, veterans accounted for 49% of college admissions (U.S Department of Veterans Affairs, 2015). Although, educational benefits were established in 1944, expansions to these benefits were added to attract new recruits after the U.S. ended compulsory military service (CMS), also known as drafting, in 1973 (Hitt et al., 2015). The bill was revamped in 1984, best known as the "Montgomery GI Bill", and re-enacted in 2008 as the Post 9/11 Veterans Educational Assistance Act or "New GI Bill," which offers a wider array of benefits than previously offered (Hitt et al., 2015). Various iterations of the GI Bill evolved to meet the changing demands of the transitioning veteran as well as the changing economic and

political landscapes to which they return. For example, post-World War II, the United States saw an unparalleled economic boom and the rise of the middle class. Unemployment rates were low and opportunities for unskilled work were prevalent. Today's economic climate is considerably different. Post-secondary education is far more necessary now to qualify for existing job opportunities. The new labor market and potential for career advancement are cited as chief among reasons adult, non-traditional student learners enroll in college (Kinser & Deitchman, 2007). In one study, 24% of surveyed military veterans identified the following as the primary reasons for enrolling in postsecondary education: the competitive job market, educational deferments and choice to volunteer for military service as well as the availability of expanded educational assistance, (Steele, Salcedo, & Coley, 2010; Sander, 2012).

Post 9/11 GI Bill

The latest iteration of the Bill, passed in 2008, expanded the educational benefits and is comprised of five thematic components to help veterans achieve their educational goals and benefit themselves, their families, and society (GAO, 2007; Serow, 2004; Smole & Loane, 2008). Codified under Title 38 U.S.C., Chapter 33, the stated purpose of the Bill is multi-faceted and is designed to 1) reward members of the Armed Forces for service on active duty since September 11, 2001 2) maintain a history of offering educational assistance to veterans; to respond to the needs of the Armed Forces when not at peace 3) to demonstrate the high esteem with which military service is held 4) to recognize the difficult challenges involved in readjusting to civilian life after serving and 5) enhance the educational assistance benefits to those who serve on active duty after September 10, 2001 (Dortch, 2012, pp. 1–2).

Unlike previous versions of the education bills, the Post-9/11 G.I. Bill extended benefits to provide more money for tuition and books, as well as subsistence or housing allowances for

more than two million Gulf War-era II veterans. For the first time, these new benefits also provide eligible service members the ability to transfer unused educational benefits to their spouse or children (Grossman, 2009; Kelty, Kleykamp, & Segal, 2010, VA, 2009).

Sander (2012), reported that because of the drawdown of American forces deployed to Iraq and Afghanistan, as well as an overall reduction across all military branches, approximately one-half million returning veterans have opted to use their post-9/11 G.I. bill benefits in recent years. The United States Veterans Administration estimated that there has been a 42% increase in military veterans enrolling in college since the 2009 signing of the Post-9/11 GI Bill (National Center for Veteran Analysis and Statistics, 2015). The Post-9/11 GI Bill can be used at colleges, universities, trade schools, on the-job training, apprenticeships, and flight schools. In addition, the program can be used for tutorial assistance, licensing and certification tests, such as the SAT and LSAT. The bill can cover all in-state tuition and fees at public schools but may not cover private schools or out-of-state tuitions (VA, 2016). Because these benefits are not considered when calculating a student's eligibility for need-based Pell grants, it is possible to receive both Pell grants and GI Bill benefits. Lastly, subsistence or housing allowances for enrolled students are not subject to federal income tax.

2.5 Characterizing the Student Veteran

Returning service members choosing to pursue or reenter post-secondary educational settings are typically older (80.4% older than 25) and more likely to be non-white than previous generations (44% versus 10% during Vietnam) and more non-white than the typical college student (Cook & Kim, 2009; IOM, 2010; O'Herrin, 2011; Cate & Davis, 2016). Considered nontraditional students (i.e. beginning or continuing college later-than-typical), more men are enrolling than women; however, women are closing the gap, currently representing

approximately 30% of students with military experience (Radford, 2009). Of veterans who choose to attend college, seventy-seven percent choose to do so part-time, 33% of those who attend college have children, and 14% of those are single parents (Cook & Kim, 2009; Wheeler, 2012). The addition of familial responsibilities (i.e. childcare, financial, spousal) may lead to academic hardships as more time is spent caring for dependents and working outside of school than typically matriculating students who enter university directly from high school (NSSE, 2010). Student veterans often are considered transfer students because of the college credits they bring with them earned before entering or while in military service. Between 2007 and 2008, 4% of all undergraduates enrolled in postsecondary education were active-duty military personnel or veterans (O'Herrin, 2011). In the same study, a majority of students with military experience attended public two-year institutions (43%). Twenty-one percent attended four-year institutions, with 12% enrolled in private nonprofit institutions and 12% enrolled in private for-profit institutions (Radford, 2009). Data from the Student Veterans of America (SVA) Spotlight (2016), the largest attempt to date to comprehensively capture current student veteran demographics, indicates that a large proportion of retired military service members may also enroll in college upon retirement from the military, likely individuals in their early to late 40's. The difficulties faced by this group assimilating into a college environment designed around a younger demographic may be even more acutely felt (Cate & Davis, 2016). Veterans of recent conflicts are also less likely to complete their education than veterans of previous wars (68.1% veterans of WWII/Korean conflict versus 51.1% GWE-II) (Cate, 2014). While more veterans than ever before are choosing to enroll in college, some reports have estimated that the student veteran first-year postsecondary dropout rate is as high as 88% (Briggs, 2012). The disconnect between those interested in pursuing higher education and those who finish their degree may

highlight both the complexity and competing responsibilities this generation of veterans face as well as insufficient or incomplete educational and career planning. Identifying the factors that may contribute to increasing or decreasing student veterans' perceived confidence in choosing and persisting in a path towards academic or career goals are undoubtedly multifaceted and complex and deserve increased attention. The current study is a step towards that end.

2.6 Educational Barriers

Although caution is warranted in making any sweeping generalizations about any groups of individuals, especially a group as diverse as military veterans, research suggests that the more "typical" student veteran is one who likely transitioned directly from high school to the military and whose work and educational experience is primarily within a military context (Clemens and Milson, 2008). For many of these veterans, their educational and work history may result in limited knowledge about the civilian workforce and they may lack nonmilitary professional networks useful in expanding their choices and interests (Clemens & Milsom, 2008).

Further, many student veterans have had substantial breaks from academic environments, relative to their civilian peers. These breaks in education may result in difficulty adjusting to the rigors of college as well as developing or remembering effective study habits necessary for success in college (Falkey, 2014). The curriculum expectations and increased reliance on technology may also have changed during the student veteran's tenure in the military, requiring the veteran to update requisite skills and find resources necessary to be successful. In a qualitative study of student veterans, DiRamio, Ackerman, and Mitchell (2009) found that student veterans identified poor study skills as one of the adjustment elements most relevant to their experience.

One of the most important adjustments required of student veterans is to adjust to the culture of academia itself (Rumann, Rivera, & Hernandez, 2011). Military life is communal, highly structured, and centered on a shared mission, values, and teamwork. The needs of the mission come before personal autonomy, with the result being a limitation on individual decision-making. The college environment, by contrast, is typically designed to encourage creativity, individualism, self-discovery, independent thought, critical analysis, challenging authority, and structuring individual schedules, all which may be antithetical to the environment service members are used to, making this transition even more difficult (Kuh, et al., 2005; Rumann & Hamrick, 2009; Bauman, 2009; Zinger & Cohen, 2010; Kelty, Kleykamp, & Segal, 2010). Although faculty members are generally considered allies to all students, they, as well as fellow students and staff, may lack understanding of the experience of this generation of veterans, which may impact how helpful these individuals are perceived to be by student veterans (Livingston, 2009).

Kuh et al. (2005) recognized social integration as one of the precursors of a successful college transition. The interests, concerns, and priorities of traditionally aged college students tend to differ from veterans who may not be much older but have had significant life experience garnered through their military experience (Steele, Salcedo, Coley, 2010). Student veterans expressed difficulties in connecting with their peers and reported problems with faculty who had little knowledge or experience of military culture (DiRamio, Ackerman, & Mitchell, 2008). Furthermore, having limited academic and social support networks (e.g. the ability to attend classes with friends from high school or with friends made before deploying or moving to a different duty station) as well as changes in cognition (e.g. inability to concentrate), may create unanticipated or unforeseen challenges for some student veterans and may lead to further

isolation. Given the reluctance most veterans have expressing their combat experiences to others, this lack of community and cognitive and/or behavioral changes may be particularly isolating, especially when attempting to assimilate back into a population who have not served and have limited or no context for the lived experiences of the veteran.

Role of Disability in Education

In addition to the challenges related to educational transition, many veterans who enroll in postsecondary institutions will come with new or exacerbated disability, including, but not limited to, physical wounds such as amputations, burns, spinal cord injuries, nerve, organ and/or extremity damage, and vision or hearing loss as well as mental health issues including (PTSD), and brain injury (DoD, 2014; Church, 2009; McGeary, Ford, McCutchen, & Barnes, 2007). These conditions may also exacerbate existing disability that was not previously diagnosed or known to the individual but is now compounded by a new injury such as PTSD or TBI (Church, 2009).

Experiencing military-related injuries may negatively impact the educational performance of student veterans. Student veterans with such disabilities tend to have lower grade point averages (GPAs) than their civilian counterparts (Durdella & Kim, 2012) and lower completion rates of their postsecondary programs than those, military or civilian, without disability (Cate, 2013). These individuals are further disadvantaged, relative to other students with disabilities, in that they have likely never been in the academic "disability pipeline". They do not come with Individualized Education Plans (IEPs), may not be as well-versed in disability-related accommodations or have as well-developed self-advocacy skills. To the contrary, they may arrive on campus in denial of their disability and with a perception that accommodations are "unfair" and only for the weak. They may have no understanding of which accommodations

might help them to succeed in college and may possess a set of medical records that provide little discussion on the impact of their disabilities on reading, writing, concentration, thinking, or learning.

2.7 Employment Transition

Employment is a critical component of reintegrating into civilian society. Obtaining employment has been shown to mitigate numerous transitional issues veterans confront, such as homelessness, incarceration, addiction, domestic abuse, and can even be therapeutic for those who transition with psychological injuries (Bullock, et al., 2009; Perls, 2009; Tanielian & Jaycox, 2008; Wehman, Targett, West, & Kregel, 2005). Employment, as a means of reintegration, has been part of the transitioning veterans' narrative since the Revolutionary War (Gerber, 2003). Although success, strategies, and labor markets have varied considerably since then, the United States Government has long made employment a priority for their transitioning veterans, regardless of war-related wounds, and has invested millions of dollars in developing strategies and services to aid them.

Transition Assistance Program (TAP)

Today, efforts to not only equalize opportunity but to prepare individuals holistically for their transition from military service have become more systematic and thoughtful. Pursuant to the Veterans Opportunity to Work (VOW) to Hire Heroes Act, signed into law by President Obama in 2011, all service members who are separating, retiring, or being released from active duty after serving for a period of 180 continuous days or more on active duty, must:

1. "Complete all mandatory requirements of the VOW Act, which includes Pre-separation Counseling to develop an Individual Transition Plan and identify their career planning needs.

2. Attend the VA Benefits Briefing I and II to understand what VA benefits the Service member earned, how to apply for them, and leverage them for a positive economic outcome.
3. Attend the Department of Labor's Employment Workshop (DOLEW), which focuses on the mechanics of resume writing, networking, job search skills, interview skills, and labor market research." (Office of the Under Secretary of Defense, 2016).

In 2012, the Transition Assistance Program (TAP) underwent significant revisions brought about by the work of the executive branch's Veterans' Employment Initiative Task Force and intended to conform with the VOW to Hire Heroes Act of 2011. Now called, "Transition GPS", participation in the programs and services offered are mandatory for nearly all military personnel (Collins, et al., 2014). The redesigned core curriculum now includes six modules: pre-separation counseling (4 hours), VA benefits (6 hours), employment workshop (24 hours), financial planning (4 hours), resilient transition (1 hour), and a crosswalk between military and civilian skills that includes a "skills gap" analysis (2 hours). Veterans are also required to develop an individual transition plan and must verify that he or she meets career readiness standards and has a viable individual transition plan. A separating veteran is not cleared to do so until providing proof that these requirements have been fulfilled. Receiving pre-separation counseling is defined as completing a pre-separation counseling checklist (i.e., DD Form 2648 and DD Form 2648-1) at least 90 days prior to separation. The trainings are typically delivered in one-to-five-day workshops via PowerPoint presentations by transition staff.

Vocational Rehabilitation and Employment (VR&E)

Authorized by Congress under Title 38, USC, Chapter 31 and Code of Federal Regulations, Part 21, also referred to as Chapter 31, VR&E provides evaluation, vocational counseling and planning, job placement assistance, job training, case management, medical referrals, independent living services, and other rehabilitation services to veterans with service-connected disabilities determined necessary to reach an individual's employment goal (United States Department of Veteran Affairs [VA], 2016). To be eligible for the services provided by VR&E, a veteran must: (a) expect to receive an honorable discharge upon separation from active duty, (b) obtain a memorandum disability rating (i.e. a preliminary rating determined by the VA for eligibility for VR&E services given prior to discharge) of 20% or more, and (c) apply for VR&E Service (VA, 2016).

Once eligible, the veteran meets with a Vocational Rehabilitation Counselor (VRC) for a comprehensive evaluation to determine if he or she is entitled to services. The evaluation includes assessing disability-related barriers to employment, as well as an interview providing the VRC with valuable context for the nature of the impairment, the individual's employment goals, and any previous work experience, including the veteran's occupational specialty while serving. From there the VRC and veteran can begin working to identify the veteran's transferable skills, aptitudes and interests, the current labor market with respect to the individual's stated employment interests and selecting one of five tracks - reemployment with a previous employer; job placement; self-employment; training or education towards employment-specific goals; or independent living services - that best fits the needs of the individual. Once selected, the veteran can work with their VRC to develop an individualized rehabilitation plan outlining the resources and services, as well as metrics for evaluating success, needed to achieve identified goals (VA, 2016; Ellison, et al, 2011).

2.8 Employment Barriers

A sizeable proportion of veterans returning from the conflicts in Iraq and Afghanistan have indicated they have trouble in securing stable employment. Issues such as homelessness, mental health problems, disabilities, gaps in work history, and criminal records, all of which are prevalent among veterans at a greater incidence than with the civilian population, can hinder the chances of a veteran getting a job. (Phillips, et al., 2007; Ruh, Spicer, & Vaughan, 2009). Sayer, et al. (2010) reported that 25–41% of Afghanistan and Iraq combat veterans who used VA healthcare experienced some-to-extreme productivity problems after deployment (e.g., problems keeping a job; completing the tasks needed for home, work, or school). The post-2008 economic crisis and its aftermath likely contributed to widespread and unusually high unemployment rates for this population as well as the rest of those attempting to enter the work force. For veterans receiving disability compensation benefits, research indicates they are fearful that they will lose benefits they are otherwise entitled to or experience failure in their respective workplace if they return to work (Resnick & Allen, 2007). This fear may be felt more acutely by those with severe disabilities (i.e., those with VA disability ratings greater than 50%) as evidenced by their limited participation in the labor force relative to veterans with lower disability ratings or non-disabled peers (BLS, 2018). Participation in the labor market however, is not the only impact disability has on employment.

Role of Disability in Employment

In Vietnam-era veterans, poorer mental health (particularly PTSD) was associated with lower income, unemployment, and job loss (Schnurr, Lunney, & Sengupta, 2004; Vinokur, Caplan, & Williams, 1987). Similarly, Sayer et al. (2010) reported that combat veterans of Gulf War-era II who screened positive for PTSD were five times more likely to report problems

finding or keeping a job than those who screened negative. Likewise, although not as well studied, in one sample, 45% of veterans of recent conflicts seeking VA care for TBI reported being unemployed (Cohen, Suri, Amick, & Yan, 2012). Individuals with these newly acquired disabilities are also more likely to miss work, work fewer hours, be less productive at work, and have lower rates of pay, as much as 22% less per hour, relative to their non-disabled civilian colleagues (Tanielian & Jaycox, 2008; American Council on Education, 2009; Westwood et al., 2010). Mental health symptoms have also been shown to exacerbate life stressors, including financial hardships associated with chronic unemployment (Riviere, Kendall-Robbins, McGurk, Castro, & Hoge, 2011). Karney, Ramchand, Osilla, Caldarone, & Burns, (2008) found that as PTSD symptoms increase, the likelihood of work decreases. In this way, unemployment may lead to, or may be responsible for, poorer mental health outcomes and continued unemployment, which can be a particularly vicious cycle. Research indicates that recent veterans, especially those with disabilities, are unemployed at a higher rate (9.9%) than those without disability (6.7%) (Gerber, Weinstein, Frankenfeld, & Huynh, 2016; Griffin & Stein, 2015). Taken together, understanding and mitigating the effects of disability and the various roles it plays on employment, perceived or otherwise, is critical in bolstering this population's participation in the workforce.

Unfortunately, although some challenges related to career decision-making process are specifically addressed in separation counseling received by service members, its relevance to the individual is variable. Furthermore, the focus of such training is practical – providing overviews of a job search, including government employment websites and the creation of a resume and cover letters. It is ultimately up to the service member to translate this knowledge into their own career development (Cleymans & Conlon, 2014; Hogan, 2016). The lack of attention given to

career decision-making barriers experienced by veterans both within the services provided and the literature regarding this population reveal an important knowledge gap. The process veterans undergo in deciding a career path, including maximizing related benefits they may have access to and how those benefits may lead to achieving academic or employment-related goals, are significantly under researched. Career development, thought of as the systematic attending to the factors and perceived barriers that shape one's career, is critical to the success of veterans entering or returning to civilian work and/or academic settings after military service.

2.9 Career Development: Theory and Research

Career development can be thought of as the constellation of factors, including chance, that combine to shape one's career (Sears, 1982). Over the past 100 years, many prominent theories regarding career development have been put forth. No single theory, however, is sufficient to describe by itself the whole process and the many complexities of career development. Wolfe and Kolb (1980) offer the following definition highlighting the dynamic nature of career development:

> Career development involves one's whole life, not just occupation. As such, it concerns the whole person … More than that, it concerns him or her in the ever-changing contexts of his or her life. The environmental pressures and constraints, the bonds that tie him or her to significant others, responsibilities to children and aging parents, the total structure of one's circumstances are also factors that must be understood and reckoned with. In these terms, career development and personal development converge. Self and circumstances –evolving, changing, unfolding in mutual interaction – constitute the focus and the drama of career development. (pp. 1-2)

This definition underlines the important interactions and changes that occur between the individual and their environments. It also underscores how the various career theories put forth over the last 100 years have been bound by the social and economic realities in which they have been conceived. Our modern conceptualization of career has its roots in and is a product of several economic, social, and scientific factors. Given the reciprocal and interrelated relationship between work and personal life, how we make career decisions is conceptualized beyond the cognitive task of making a single choice among options presented, but rather includes the many emotional, environmental, and cultural factors that influence one's choice (Judge & Ilies, 2004; Krumboltz, 1993; Lent, 2004).

Historical Perspective

Since the fifteenth century, tremendous effort has been put forth in understanding "career" development and numerous books have been published to help people identify appropriate vocational paths (Zytowski, 1972). Career development, as a recognized theory, did not emerge until the early 20th century when Frank Parsons advanced the first conceptual framework or "formula" for career decision-making. Parsons' Trait Factor theory, as it was known, was built around the notion that a person's traits are static and can be matched to major aspects of a career. Parsons' theory and *vocational guidance* became the first framework available to career practitioners, military and civilian alike (Herr, 2001). In addition to providing an empirical base, Parsons' theory found utility in assigning people into the various military careers during times of war. Classifying individuals in meaningful ways and the adoption of intelligence and aptitude testing of the 1920's and 1930's ensured Parsons' theory would live beyond its initial application. Since then, many well-regarded theories concerning career development have been put forth (Herr & Shahnasarian, 2001). These theories demonstrate how

our thinking around career development and career decision-making has evolved and how such changes may be used as the impetus to build interventions to improve one's ability to make or better understand career-related decisions.

Several decades later, theorists such as Donald Super and John Holland would challenge Parsons' framework adding important information to career development literature. In the 1950s, Donald Super, in highlighting the importance of developing self-concept through the life span, developed the life-span theory, a complement to the burgeoning field. He postulated that a person's abilities, self-concepts, and values help prepare her/him for certain professions. Super's Life-Career Rainbow highlights the importance of thinking about how career development may correlate to one's age. Holland's career development theory challenged the static career development model of trait-and-factor theory by highlighting the changing, dynamic and developmental nature of career development and its role in vocational choice (Holland, 1973; Brown, 2002). Holland identified six personality types: realistic, investigative, artistic, social, enterprising, and conventional. His simplified occupational matching system is one of the most researched, utilized, and influential models of vocational decision-making currently in use.

Evolution of Worldviews

While resoundingly helpful, the prevailing theoretical approaches throughout much of the 20th century paid little specific attention to the various environmental factors and contexts that influence Holland's personality types. The omission of an element now considered critical to career development may be attributable to the change in philosophical worldviews witnessed over the past century. As approximations of complex phenomena, all theories, including those regarding occupational choice and career development mentioned above, are underpinned by one of two philosophies: logical positivism or social constructionism. For most of its history,

understandings of career have been influenced by the logical positivist worldview consisting of various assumptions; that a) people can be studied separately from their environments; b) people can be subdivided into categories for study; c) individual human behavior can be objectively observed, measured, and is linear; d) cause and effect can be inferred; e) the tradition of the scientific method is the accepted paradigm for identifying facts about human behavior; and f) the contexts (environments) in which people live and work are inherently less important their observable actions (Collin & Young, 1986; Hoshmand, 1989).

Emphasizing that individuals are active and not passive agents in the construction of their own reality, social constructivists, by contrast, assert that it is impossible to understand human behavior separate from the context in which it occurs. Furthermore, human functioning cannot be reduced to laws or principles and that an individual's subjective frame of reference is the only legitimate source of knowledge. Constructivism asserts that an individual's own thinking, processing and constant interaction with their changing environment forms the basis of how they perceive reality and seek stability through ongoing change. The rise and popularity of positivism, for instance, reflect the dominant thinking of the time (i.e. a focus on the individual as separate from context emphasizes the industrial era ethos of autonomy and personal responsibility). As attention and popularity of examining individual context (i.e. a person's environment and other individualized factors) and its various influences grew, so too did efforts to include them in understanding career choice among theorists.

Early research regarding environmental and contextual influences on career choice primarily focused on identifying and describing the variety of individualized factors (e.g. one's culture, gender, genetics, socioeconomic conditions, disability status) that could influence, positively or negatively, exploration of academic and career options, career decision making, and

execution of choices (e.g., Super 1957, 1980; Crites, 1969; O'Leary, 1974; Swanson & Tokar, 1991). Although critical in expanding research and interventions with regard to the mitigation of any deleterious impact of the many factors involved in career choice (e.g. cultural stigmatization of mental health conditions), less attention has been paid to the relationships between such factors and their influence on career decision-making (Brown, 1990). While early theorists began to identify relevant contextual influences (e.g., Super 1957, 1980), it was the development of Social Cognitive Career Theory (SCCT) (Lent et al., 1994) which introduced the relevance of context to understanding career.

SCCT, as a career choice process model, addresses some of these shortcomings by moving beyond the identification of environmental supports and career barriers to examine the process by which these influences affect career choices (Lent et al., 1994). By emphasizing the situational and domain-specific nature of behavior and the relatively dynamic aspects of an individual (including how individuals exercise personal agency), SCCT embraces constructivist assumptions about the individual's influence over their career development. By highlighting the relationships between one's interest and one's self-efficacy (e.g. confidence gained through educational experience in college or while serving in the military), it also provides a framework to better understand and thus address how these experiences may affect the career choices and unique career-related needs of military veterans (Bandura, Barbaranelli, Vittorio, Pastorelli, 2001).

The Usefulness of the Social Cognitive Process

Being able to understand and identify the specific factors that facilitate not only motivations toward choosing one career over another, but how these factors help transform individual interests and needs into vocational paths, is critical. SCCT introduced the relevance of

context to understanding career and has been recognized as a useful model to describe the mechanisms by which students prepare for, implement, and evaluate academic and career choices within their environments (Albert & Luzzo, 1999; Chartrand & Rose, 1996). Rooted in Bandura's (1977) Social Cognitive Theory, SCCT helps describe how career interests, goals, and performance develop through time and considers the many environmental factors that may influence the processes underlying individual choice (Lent, 1994). Bandura's work focuses heavily on two constructs: one's self-efficacy beliefs, identified as a principle factor in career decision-making, and outcome expectancy. Self-efficacy can be defined as, "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). The more an individual believes he or she can execute the behavior necessary to obtain a particular outcome, the more likely they are to do so. Outcome expectancy is one's estimate that a given behavior will lead to a given outcome.

According to Bandura (1997), self-efficacy is not a unitary, fixed or decontextualized trait, and can be acquired and modified overtime through four sources of information (or types of learning experiences):

1) Performance accomplishments - thought to be the most powerful self-efficacy source whereby the individual directly experiences, positively or negatively, performing the behaviors in question;
2) Vicarious learning - observations of models' performance of the behaviors in question, influencing one's personal assessment of his or her capabilities relative to others;

3) Verbal or social persuasion - support from significant others which provide the requisite encouragement to influence one's perception of ability to successfully complete the behavior in question; and
4) Physiological or affective states - emotional arousal experienced in regard to the behavior in question, influencing one's perceptions regarding the task.

Furthermore, Bandura (1977, 1986, 1997) postulated that one's perceptions of self-efficacy can result in three distinct behavioral consequences; (a) performance on specific tasks, (b) persistence despite encountered challenges, and (c) approach versus avoidance behaviors. Individuals with higher self-efficacy, including those engaged in career development, are thus more likely to readily engage, perform well, and persist in the face of challenges, all critical in the success or failure of most career pursuits (Betz, 2000). Lent and Brown (2006) stated that the construct of self-efficacy has received the "lion's share of attention in the research" (p. 15) because of its recognized central role in the career choice process. Given its emphasis on considering both social and cognitive influences upon behaviors, SCCT is a particularly useful theory to better understand the needs of student veterans. By applying Bandura's social cognitive theory to vocational development, Lent, Brown, and Hackett (1994) could provide a conceptual framework to explain how career and academic interests develop, how career choices are made, and how career-related performances are achieved. Per SCCT, self-efficacy is the cognitive mechanism that mediates what people know about careers and their behavior in relation to those careers, such that their confidence to perform career-related tasks (self-efficacy) predicts their career interests, choices, and performance (Lent, Brown, & Hackett, 1994). Regarding outcome expectancy, individuals are more likely to engage in career-related activities which they believe will lead to desired outcomes.

The Three-part Model of Social Cognitive Career Theory

The Social Cognitive Career Theory framework organizes three interlocking models or "parts" of academic or career development: individuals' vocational interests, choice, and performance.

Vocational interests

Vocational interests involve people's pattern of likes, dislikes, and indifferences regarding various occupations and career-relevant activities. Hansen (1984) explained that childhood and adolescent vocational interests develop as we are exposed directly or vicariously to a wide variety of activities (i.e. crafts, music, sports, math, and mechanical tasks) applicable to specific occupational behavior. Exposure to these activities invariably results in reinforcement, positive or negative, from important others. Such reinforcement, in turn, influences that individual's choice to pursue certain activities above others and further cements individual perceptions of their capability for a given task which affects their self-efficacy and outcome expectations for certain tasks (Hansen, 1984). A soldier, for instance, whose military occupation is infantry or other field without obvious civilian counterpart, in general, may feel less efficacious about (and may have less interest in) pursuing a career in the fine arts, or another career field he or she may be well-suited for. SCCT asserts that enduring interests are formed when individuals perceive themselves as competent at a task and when performing it is anticipated to produce outcomes that are valued (e.g. trophies, grades, or self-satisfaction). An important feedback loop is created affecting one's self-efficacy, outcome expectation and, ultimately, their interests (Bandura,1986; Lent, Larkin, & Brown, 1989).

Choice

Career choice is conceptually divided into three parts: 1. The expression of a primary choice (or goal); 2. Actions, such as enrolling in a training program designed to implement one's choice; and 3. Subsequent performance attainments (successes, failures) that affect future career behavior. According to SCCT, people will develop choice goals for academic and career pursuits in which they are interested and will be more likely to engage in and sustain actions (activity selection) or behaviors (practice) directed towards that interest, effectively shaping self-efficacy and outcome expectancy and increasing the likelihood of obtaining the desired outcome (Krumboltz, Mitchell, & Jones, 1976; Lent, Brown, & Hackett, 1994; Locke & Latham, 1990). If the context in which an individual is operating is not conducive to their interest (i.e. job/program is unavailable, environment not supportive, does not believe one can successfully achieve goal) they will choose the less desirable occupational paths available to them that are expected to provide adequate outcomes, and that they believe they can successfully perform (Lent, Brown, & Hackett, 1994).

Performance

The third segment of the SCCT model is performance, which is concerned with the level (or quality) of people's accomplishments and their persistence in career-related pursuits (Lent, Brown, and Hackett, 1994). Self-efficacy is a co-determinant of performance through helping individuals interpret and apply their abilities (Bandura, 1986). When an individual underestimate their efficacy for a task they are more likely to avoid challenges, set lower performance goals, and experience significant anxiety. Likewise, the overestimation of self-efficacy may result in attempting tasks for which one is ill-prepared. Thus, underestimating or exaggerating current performance capabilities may increase the risk for occupational or academic failure. Career decision self-efficacy, as a specific type of self-efficacy, is believed to be the primary influence

on academic and career decision-making examining personal capabilities involved in making such decisions and was thus chosen for this study.

2.10 Career Decision Self-Efficacy (CDSE)

Career decision self-efficacy (CDSE) is defined as "an individual's degree of belief that he or she can successfully complete the tasks necessary to making career decisions" (Betz, Klein, & Taylor, 1996, p. 48). Originally used in understanding underrepresentation of women in science and math fields, Betz and Hackett (1981) found that women with high aptitude in male dominated career fields tended to avoid such interests. This seminal work provided the first empirical evidence of the relation between self-efficacy expectations and career indecision and avoidance of career-related behaviors. Since then, CDSE has been widely studied and has been shown to be positively related to an array of adaptive career-related behaviors including career exploration (Blustien, 1989; Gushue, Clarke, Pantzer, & Scanlan, 2006; Gushue, Scanlan, Pantzer, & Clarke, 2006), vocational identity (Robins, 1985; Gushue, Clarke, et al., 2006; Gushue, Scanlan, et al., 2006), and the ability to make career decisions that are both realistic and consistent over time (Luzzo, 1993). Studies have also been conducted indicating CDSE is helpful in explaining persistence and avoidance behaviors related to making career-related decisions. These include career decidedness and longevity of career decisions among high school students (Gati & Saka, 2001), college students with and without disability, and "nontraditional" students defined as 24-years of age or older (Taylor & Betz, 1983; Restubog, Florentino, and Garcia, 2010; Luzzo, Hitchings, Retish, & Shoemaker, 1999; Gianakos, 1996; Sandler, 1998; Peterson and delMas, 1996). Taken together, CDSE is well positioned as an essential component in understanding the academic and career decision-making of student veterans.

CDSE and Disability

Research into disability's influence, positive or negative, on academic and career decision-making process is limited (Luzzo, Hichings, Retish & Shoemaker, 1999; Rojewski, 1994). Although understudied, disability seems to have a clear impact on one's career decision self-efficacy (Luzzo, Hitchings, Retish, Shoemaker, 1999). Given the increased prevalence of individuals with disability on college campuses, as well as the presence of disability among student veterans, understanding more about how, specifically, individuals perceive that disability influences their academic and career decision-making provides important insights into interventions that may increase academic and vocational participation of this population (Luzzo, Hichings, Retish & Shoemaker, 1999; Gravely, 2012).

CDSE and the College Experience

Research regarding CDSE and college students reveals its utility in explaining and predicting academic outcomes of college students, including those considered "nontraditional" and those with disabilities. In a seminal study, Luzzo et al (2009), surveyed college students with and without disability using the Career Decision Self-Efficacy Scale, and as they predicted, it was found that students with disabilities scored lower than their non-disabled peers. Furthermore, in examining CDSE of college students with physical disabilities, it was found that students who scored high on the CDSE scale were more likely to engage in career exploration. Severity of disability was also shown to correlate with lower CDSE and adjustment to disability (ElHessen, 2002). Students with and without disability who score high on the CDSE, including nontraditional students, have been found to be more decided in their career choice, less likely to change degree programs or drop out, and be more willing to seek supportive resources than those with lower CDSE (Restubog, Florentino, and Garcia, 2010; Gianakos, 2001). Furthermore,

Gianakos (1996) found that nontraditional students exhibited higher levels of CDSE than traditional-aged students and were more likely to use career resources.

Academic integration (i.e. how connected students felt within the institutional culture) has also been shown to effect positive academic outcomes. Peterson and delMas, (1996), suggested that focusing on increasing students' CDSE positively influences their integration into academic systems, and may increase a student's capacity and confidence in persisting in reaching their academic or career goal.

Synthesis

For many college students, identifying a path toward a career is an important step in their life. For student veterans, the process of choosing a career after military service may be complicated by myriad contextual and environmental factors, including disability. Social Cognitive Career theory provides a useful model for understanding and predicting the reach of these various influences on an individual's academic and career choice processes. Focusing on interventions that increase an individuals' confidence that he or she can engage in and accomplish the many tasks related to making sound academic and career-decisions, dramatically increases the likelihood of satisfying decisional outcomes. Current or former members of the armed forces, who are students, bring with them a wealth of experience, maturity, self-awareness, and work ethic necessary for academic success. However, these students may be impeded in their reintegration by factors, including injury, social and institutional barriers, as well as any number of personal factors that make the transition from military member to college student difficult. In response, the military has provided an array of resources and services designed to bridge the transition gap. For many, the services received neither adequately prepare them for life after the military nor do they explicitly include formal career development.

The factors involved in academic and career decision-making, including disability, perceived by this generation of student veterans, are largely unknown. Although much has been written about increasing academic success of veterans and preparing academic institutions for their arrival to college campuses, little is known about the decision-making processes student veterans undergo, and resources they utilize, to determine an academic and career path after military service.

Chapter 3: Methods

3.1 Research Design

This section describes the primary components of the research design for this study. It begins with an overview of the study design and the procedures for mixing methods, followed by a description of the sampling strategy, population, and interview procedures and strategies for qualitative analysis used in Phase I. Phase II will be described next, including survey development and implementation, sampling procedures, human subjects review, quantitative analysis, and potential limitations.

Study design overview

The purpose of this research study was to examine the factors veterans enrolled in college perceive as influencing their career decision-making self-efficacy. Three overarching questions guided this study and informed its design: 1) What factors related to military service do student veterans' perceive as being associated with their career decision-making self-efficacy; 2) What resources are student veterans using to support their educational and career development; and 3) For those student veterans who identify as having a service-connected disability, what impact do they perceive their experience of disability, if any, has on their self-efficacy with respect to career decision-making?

To address these research questions, a multiphase exploratory study was conducted, employing both qualitative and quantitative methods (Creswell & Clark, 2007). In the qualitative phase (Phase I), individual interviews were conducted to elicit the attitudes and opinions of student veterans with respect to the relationship between their experiences in the military, including for some, their service-connected disability, and educational planning and career decision-making. During these interviews, attention was paid to the specific language these student veterans used to

describe their experiences. Further, interviewees were asked about the types of questions that should be asked to understand the experiences of student veterans in career planning and decision-making. Interviews were analyzed for content and, together with data gathered from an extensive literature review, informed the development of a web-based survey that was used in Phase II of the study.

The primary justification for using mixed methods in this study was complementarity (i.e., increasing understanding by examining different elements of the same complex phenomenon). Utilizing a mixed methods approach for this study provided opportunities to: a) increase the understanding and insights of student veterans' experiences in academic and career development via both interviews and surveys; and b) build upon previous research using established survey instruments. The perception of personal and environmental influences military service and/or service-connected disability may have on student veterans as it relates to their career decision-making within the context of higher education are inherently complex (Luzzo, 1999; McWhirter, 1997; Rivera et al., 2007). The use of both qualitative and quantitative methods provided greater responsiveness to the complexities inherent to career decision-making and the many variables introduced by military service than would have been possible with a single method (Greene, Benjamin, & Goodyear, 2001; Johnson & Onwuegbuzie, 2004). A semi-integrated approach, described by Teddlie and Tashakkori (2006), whereby qualitative interviewing informed the development of a primarily quantitative survey; including specific items regarding facilitators and barriers salient to the target population's career self-efficacy.

3.2 Phase I

Interviews with student veterans were conducted in order to understand the perspectives and experiences of this population regarding their academic and career decision-making, and to develop survey questions that are meaningful and culturally sensitive.

Inclusion criteria (Phase I and II)

Participants in this study were required to meet the following inclusion criteria: a) U.S. veteran (defined by Federal Statute); b) who served in Gulf War-era II (2001 to present); c) 18 years of age and older; d) currently attending university at least part-time. The federal statue defines a veteran as "a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable" (VA Law 38 U.S.C. § 101, 2, 2012). Respondents were asked if they had a service-connected disability but were not asked what type of disability or if they had disabilities not related to their service. Respondents were not screened inclusion or exclusion based on service-connected disability. No restrictions were placed on gender.

Excluded from this study were service members not considered veterans by Federal Statute; veterans separated from military service before 2001; veterans under the age of 18; veterans not enrolled at least part-time in college, or service members who received a dishonorable discharge or bad conduct discharge as they are not required to participate in pre-separation counseling and are not eligible for the transition assistance programs and workshops offered by the military (Department of Veterans Affairs, 2016).

Recruitment Strategy and Population (Phase I)

The University of Washington's (UW) Office of Student Veteran Life (OSVL), Veterans Education Benefits Office (VEBO), and Disability Resources for Students (DRS), were recruited

to assist in distributing flyers to students known by these offices to be currently enrolled veterans and thus, potentially eligible to participate. The flyer was also posted electronically in a monthly newsletter administered through OSVL.

When interested individuals contacted the researcher, they were screened by telephone, text, or email, depending on their preference, to ensure that inclusion criteria were met. Those who agreed to participate and met inclusion criteria were offered several dates and times for participation in an interview. Each participant was asked to sign a consent form (Appendix A1) and to complete a brief questionnaire of demographic information (Appendix B).

Phase I: Interview Methodology

The primary purpose of the qualitative interviews was to inform the development of survey questions by asking student veterans generally about their military experience as it related to career decision-making self-efficacy. From there, probes were used to ask more specifically about the types of questions, and language, which should be included in a survey addressing career self-efficacy among military veterans. Military members are part of a unique culture. As such, it is critical that any instrument developed possesses sensitivity to the language, systems, and culture inherent to this population (Banks & McGee Banks, 2001). Hearing veterans' experiences, in their own words, allowed for the development of nuanced and focused survey questions.

Interview procedures

The interviews were held in-person at a convenient but private location on UW's campus. Prior to beginning each of the interviews, participants were asked to complete a consent form (Appendix A1) and a demographic questionnaire (Appendix B), described in detail below. The interviews followed a semi-structured format allowing both individual perspectives to be elicited

as well as considerable flexibility in following the flow of the conversation sparked by the general interviewing guide (Appendix C). The guide was used to ensure the same general areas, informed by the overarching research question (i.e. does military service and/or service-connected disability influence military veterans career decisions in post-secondary contexts), were addressed across all interviews (Patton, 2002). At the beginning of each interview, the researcher reviewed the purpose of the study and the steps taken to protect the confidentiality and anonymity of the participant. Permission to audiotape was obtained. Each interview lasted between 45 minutes to 1 hour and included 4-5 potential topic areas, each with several probes designed to elicit the detail and context necessary for creating understanding of their individual perspective, insight, and suggestions on potential survey items (Appendix D). For example, "Did your experience in the military change or influence your career path?" Probes for this question included "What questions might we ask to learn more about that?" and "How closely does/did your Military Occupational Specialty (MOS) relate to your current career goals?" Other probes such as, "Can you give me an example?" and "What do you mean by that?" were also used to clarify or add additional context to responses (Bogdan & Biklen, 2007). The interviews were audio-recorded and then transcribed using CaptionSync©, a professional transcription service. Transcriptions were reviewed by the principal investigator to verify accuracy.

Content Analysis

A content analysis was conducted to inform and further develop specific survey items solicited from the interviewees. Analysis began with examining the content of the individual interviews. The coding process began with reading the transcripts multiple times to become familiar with the content. Concrete and descriptive codes, based on the main topic areas addressed in each interview, were developed. Similar and unique comments and suggested

survey items were organized by topic and relevance relative to and driven by the overarching research question (e.g. does military service and/or service-connected disability influence military veterans career decisions in post-secondary contexts). For example, all participants were asked “Did your experience in the military change or influence your career path?” A corresponding code, “Military influence on decision-making”, was created to capture the variety of influences described. Questions pertaining to utilization of career-related resources (i.e. career counselors, transition assistance offered through the military) and the perceived effectiveness of the assistance provided were also asked. Responses to this line of inquiry, including identification of specific resources, were coded “Career-related resource utilization”. The development of the coding system was an iterative process, refined with input from the dissertation chair. Once the coding structure was finalized, the principal investigator coded all the transcripts in their entirety. Dedoose©, a computerized qualitative data analysis software program, was used to organize and sort excerpts of the transcripts into their respective topic areas (Sociocultural Research Consultants, 2011).

After the transcripts were coded and excerpts were sorted into topic areas, the different topics were read in-depth and summarized. Common elements emerged through this process representing the most common and/or most salient experiences and perspectives described by participants. Given the wide range of military experiences (i.e., combat exposure, presence of disability, military rank), effort was made to represent and describe both unique and common experiences across participants. For example, only one of the participants who endorsed having a disability described being separated from their unit and placed in a battalion specifically for injured soldiers. The services and opportunities provided allowed for a far more systematic and thorough examination of current and future academic and career goals relative to other

interviewees. Other participants with disability described different disability-related benefits they received because of their injury, such as access to Vocational Rehabilitation and Employment (VR & E), which facilitated similarly useful exploration of academic and career aspirations. Given the similarities, although provided in unique contexts, the same code, "Influence of service-connected disability", was used.

Trustworthiness of data

Several methods were utilized to support trustworthiness of the data (Lincoln & Guba. 1985). Accuracy of transcripts was supported through the audio recording, verbatim transcriptions, and reliability checking for accuracy of the transcripts. Two members of the research team were involved in code development. Once all transcripts had been reviewed, analyzed, and a draft survey had been developed, opportunities for member checking were provided. A discussion of the analyses process and how the interview content informed the survey items will be described in detail in Chapter 4. Four interviewees were chosen, at random, to provide feedback on item wording, sequence, and understandability from their perspective. The draft survey was also sent to the director of UW's Office of Student Veteran Life, a military veteran with both personal and professional knowledge of the population under study. Each of the five individuals included in the member check were emailed a draft of the survey items and invited to respond to the items themselves, the order in which they appear, and/or the language used as a means of reducing any ambiguity and increasing the appropriateness of the questions asked. No suggestions for modifying any of the questions were received from the participants. Adjustments were made to clarify the wording of two items based on feedback received from OSVL. This "member check" helped ensured interpretations adequately represented their constructions of reality and the questions were consistently understood across participants in the

way intended by the researcher, strengthening the reliability of the items themselves (Lincoln & Guba, 1985).

3.4 Phase II

Number of Participants (Phase II)

The expansion of the Post 9/11 GI Bill in 2008 extended educational benefits for spouses and dependents of military veterans, in addition to veterans themselves (Dortch, 2012; Bell, 2013). Due to differences in how individual universities track and whether or not individual veterans choose to disclose their military status, the exact number of potential veterans across these universities and overall response rate is unknown.

Protection of Human Subjects

Prior to conducting this study, the Division of Human Subjects at the University of Washington, the Institutional Review Board (IRB), determined that this study did not require review and was exempt.

3.5 Measures

Researcher Developed Items.

With input from the qualitative interviews conducted in Phase I reflecting both the environmental context of the participants and a thorough literature review, 20 items were developed, five (5) of which were designed to elicit demographic information (i.e. military rank, gender, age, class standing) to better understand the sample. A more detailed discussion as to how the 20 items were developed and selected is provided in chapter 4. The 20 items included "Yes/No" response options as well as Likert-type items using 1 (Very effective) to 5 (Very ineffective) response options. Opportunities for short written responses were also provided for

items for which such a scale would have been inappropriate, (i.e. In what ways, if at all, did your military experience influence (or change) your academic and/or career goals?).

Career Decision Self-Efficacy Scale.

In addition to the items described above, respondents were also asked to complete the Career Decision Self-Efficacy Scale – Short Form (CDSE-SF; Betz, Hammond, & Multon, 2005; Betz & Klein, 1996). The scale contains 25 items, which are evenly distributed among five subscales: Self-Appraisal, Occupational Information, Goal Selection, Planning, and Problem Solving. Each subscale score is the sum of the responses given to the five items on that subscale; this sum is divided by 5 to return the score to the units of the response continuum (i.e. No Confidence – 1 to Complete Confidence – 5). The CDSE-SF scores and subscale scores were grouped based on the variables of interest: disability status, combat exposure, and military rank. Means were compared using independent samples t-tests, *p* values set at .05. Means of the six scores, including total score, generated by the CDSE-SF and their standard deviations of the distributions were used to further describe the scores.

Including the CDSE in this study served two purposes. The first is that results of the CDSE provided additional insights into how student veterans think about their personal capabilities as they relate to making educational and career decisions. Additionally, including a previously-developed survey allowed comparisons to be made across research studies.

Survey implementation

Sampling Strategy and Population (Phase II)

Once all researcher-developed questions were in their final form, these items and the existing CDSE instrument, were uploaded into a web-based format using Catalyst Web Tool, an online survey research tool (Catalyst; University of Washington, 2016) and were initially sent to

strategic members of the UW community with access to student veterans at the University of Washington (e.g., leadership at the Office of Student Veteran Life, VA Certifying Officials at the Veterans Education Benefits Office, and service coordinators at Disability Resources for Students with veterans-specific caseloads). Web-based surveys have some advantages over traditional mail surveys in that they are more efficient in distribution and data management (Kaplowitz, Hadlock, & Levine, 2004), they are perceived by many survey respondents to be easier to complete, less likely to be misplaced, and they can often reach a larger number of potential respondents (Kiernan, Kiernan, Oyler, & Gilles, 2005).

The emailed on-line survey invitation informed prospective participants of the goals of the study, that their responses would be anonymous (i.e., no data linking individual survey participants to their responses would be maintained) and provided contact information of the principal investigator should further questions arise.

In order to expand the number of respondents, an additional five four-year universities in the Pacific Northwest were recruited for Phase II of this study. They included the University of Washington -Seattle, Bothell, and Tacoma campuses, Western Washington University, and Eastern Washington University. The language of survey items and response options pertaining specifically to UW-Seattle (i.e. career resources specific to that campus) were amended or omitted to more generally reflect the experiences of student veterans across these campuses. Similar recruitment strategies were followed whereby strategic members of the university communities (e.g. academic counselors with caseloads consisting of student veterans with disabilities, and leadership within campus veterans' services) with access to student veterans were contacted via email and asked if they would be willing to distribute notices about the study.

A link to the survey along with a recruitment email including information about the study and instructions were sent electronically for dissemination to the available mailing lists. To maximize the number of participants who were given the opportunity to participate, each institution was encouraged to email the link more than once. Emails were sent to each of the university contacts as a reminder after two weeks (Dillman, Smyth, & Christian, 2009).

Snowball sampling, in which participants are encouraged to tell other potentially eligible student veterans about the research, who may or may not be on one of the aforementioned mailing lists, was also used in both phases of this study.

3.7 Analysis

Descriptive statistics were used to summarize and organize the basic features of the survey data both in narrative and graphic forms, including distributions and central tendencies. Comparisons between the experiences of those with and without disability, officers versus enlisted service members, and the influence of self-reported combat experience were made. A t-test was conducted as N was adequate in the groups compared and homoscscedasticity was tested at p less than .05 and found to be tenable.

Disability was chosen for comparison for a number of reasons. Disability is assumed to be intricately related to the social cognitive variables and subsequent career development process (Lent, 2002). Additionally, research supports disability being an important contextual influence which may significantly affect self-efficacy with regards to career decision-making (Lent et al., 1994; Wheeler, 2012; Green & Hayden, 2013). A paucity of research exists, however, examining possible correlations between self-efficacy and disability in a military population. Within both academic and military environments, the presence of disability also dictates many of the services

and supports available, most of which are neither accessible nor known to veterans without identified an identified disability.

The distinction between officers and enlisted was made because of the potential differences in experiences, both academic and experiential as it relates to military service. Officers are also more likely to have a 4-year degree and more experience, better employment outlook, and potentially more opportunities to explore and strengthen their career self-efficacy than, for instance, those who enlist directly out of high school (Church, 2009). Officers are also more likely to be in leadership roles and may be tasked with counseling transitioning service members under their command and providing information on the services and supports available, which, in turn, may increase awareness of various resources and how to access them for their own transition. They also tend to be older, having had more military experience, both of which may relate to attributes such as self-discipline and resiliency potentially contributing to increased self-efficacy as it related to career decision-making (Luzzo, 1999).

Combat experience was chosen because of research supporting the increased incidences of difficulties related to reentry of combat veterans relative to non-combat veterans (Morin, 2011). The frequency of deployments into combat zones, a hallmark of GWE-II soldiers, has been shown to increase incidences of PTSD, TBI, substance abuse, interpersonal conflict, and spousal discord, all of which have the potential to complicate educational and career decision-making (DiRamio & Spires, 2009; Bragin, 2010; Tanielian & Jaycox, 2008; Church, 2009; Madaus, et al. 2009). Those who experience success under such difficulty may become more confident which, conversely, could also influence one's CDSE scores.

Analysis of written responses to open-ended began by reading the responses multiple times to become familiar with the content. Specifically, to examine the variables of interest, such

as the factors student veterans perceive as relating most closely to their career decision-making or resources utilized towards that end, responses to questions related to these topics were organized into similar and unique groups. For example, responses to the question, “In what ways, if at all, did your service-connected disability influence (or change) your academic and/or career goals?,” were organized into the various ways, common and unique, that were identified. For some in this sample, adapting to new physical and mental impairment impeded or precluded individuals from pursuing various career interests. For others, service-connected disability provided access to additional resources used in strengthening career development and/or provided a path towards education or re-training.

Chapter 4: Results (Phase I)

This chapter describes the results of Phase I of this study. The participants in Phase I will be described beginning with their demographic information. This will be followed by results of the content analysis of their interviews, using the methods described by Potter & Levine-Donnerstein, 1999, and its influence on the development of specific survey questions. Results of Phase I are organized according to the three overarching research questions.

Description of Participants (Phase I)

A total of 17 student veterans responded to the recruitment strategies described in Chapter 3. Of these, 13 agreed to participate in the interviews. The sample consisted of three women and 10 men. More than half of the participants (8) indicated having a service-connected disability. Six of the 13 participants reported being undergraduate students. The majority (7) were in graduate programs. Participants were asked to report their age by category. Most (12) reported being 26 years old or older. All branches of the military except the Coast Guard were represented in the participant pool. Table 1 presents a summary of demographic information.

Table 1

Demographic Characteristics of the Participants, Phase I

Participant Code	Age	Gender	Class Standing	Major	Military Branch	Disability
P1	26-30	Male	Senior	International Studies	Army	No
P2	26-30	Female	Graduate Student	Public Administration	Army	Yes
P3	31-40	Female	Graduate Student	Public Health	Navy	Yes
P4	26-30	Male	Junior	Construction Management	Marine	Yes
P5	41-50	Female	Graduate Student	Communications and Digital Media	Air Force	Yes
P6	31-40	Male	Graduate Student	Geographic Information Systems	Air Force	No
P7	51+	Male	Graduate Student	Physics	Navy	Yes
P8	41-50	Male	Graduate Student	Urban Planning and Design	Army	No
P9	51+	Female	Graduate Student	Infrastructure Planning and Management	Army	Yes
P10	19-25	Male	Freshman	Undecided	Marines	No
P11	26-30	Male	Junior	Bioengineering	Marines	Yes
P12	31-40	Male	Senior	English/Psychology	Marines	Yes
P13	26-30	Male	Junior	Geography	Navy	No

As discussed in Chapter 3, a content analysis was conducted to organize the qualitative data and inform the development of survey items. Common and unique experiences described by

this sample provided important insight, context, and perspectives of student veterans. The results of the content analysis were used to inform the development of survey items that addresses the specific research questions guiding this phase of the inquiry.

The results of the content analysis are described next, organized by each of the three research questions. Included in the results of the content analysis are how the content of the interviews were used to in the development of specific survey items. These results are followed by the results of Phase II, discussed in Chapter 5.

4.1 Research Question 1

What factors related to military service do student veterans perceive as being associated with their career decision-making self-efficacy.

To address this question, interviewees were asked to discuss the ways in which their military service may have influenced their career decision-making. From the interviews conducted in Phase I, several areas were most commonly considered to be important to include in a survey both as primary questions as well as potential response options.

Influence of military experience on decision-making

Participants shared a wide range of experiences regarding the influence that military service had on academic and career decision-making. One student (P11) described the exposure to various career fields in military service as most helpful in determining a future career path. Although not a combat medic, this soldier became interested in medicine by working in proximity to military doctors: “By the procedures and, you know, the abilities of some of the [medical] corpsman…I was always interested in, you know, [their] problem solving process.” Another student referred to his experience in the military working with geospatial products which, he said, “led me to search for a program that was in that field.” (P6)

Similarly, finding work that aligns well with their former military life, for some, helped alleviate some of the relative ambiguity of career decision-making and, in turn, made the transition easier. One participant described his interest in construction management as being solidified when he realized "the setup, the hierarchy, the communication [on construction sites] [was] almost a carbon copy of the rank structure and hierarchy in the military." (P4)

Another student veteran described having a similar epiphany. The student, a former radio operator, decided he did not want to pursue similar work as a civilian. He described realizing the "satisfaction [he gained] out of helping people [be successful in their work]" and decided to be a teacher (P12). For these individuals, the structure of the work they did in the military, not necessarily the specific job they did, was helpful in deciding their career paths post military service.

For other participants, interests prior to their military service were a factor in deciding a career path post-service. For instance, one participant had always been interested in pursuing a career in education. (P7) Another participant's studies had been interrupted by military service. They described "[coming] back from military and pursu[ing] the same thing." (P1) For another student, the choice of major happened more organically through a desire to do something completely new. An interest in biology led them to "try[ing] the science transfer degree." (P15)

On the other hand, for two of the participants they would not pursue a position similar to what they had done in the military. One student (P2), said that she would "rather poke my eye out with this pen" than pursue her military job, healthcare administration. Another student, working within linguistics while in the military, chose to change course in favor of "learn[ing] something that could make [them] more of a better candidate [when] applying for jobs." (P13)

Access to education, or lack thereof, during and after military service, was another important factor in career decision-making for these participants. One soldier described the pursuit of education concurrent with the physical demands of their work in the military as being impossible. Reflecting upon the rigors of his work in the military he stated, "…if you're not deployed, you're training to be deployed and you're out in the field every week. You know, and it's like, you don't have access [to a computer] -- you like, you're sleeping in just a sleeping bag out in the field getting rained on." (P4) Here, his decision to pursue higher education, as a pathway to a new career, was hindered or delayed by his military responsibilities. In contrast, others earned entire academic degrees while on active duty. The Air Force, for instance "actually has a community college…and, while you're in this financial assistance, it's free to take classes." (P3) In this case, the offerings of this branch of the military may help inform or determine the specific field or career path one chooses to enter post-service. Other participants spoke specifically of the educational benefits provided by the military as a primary reason why they were pursuing higher education. One participant even suggested paying out of pocket for an associate degree so as to save the 36-month educational benefit, provided by the Post 9/11 GI Bill to later complete a bachelor's, master's, or even doctoral degree. By doing so, a student veteran can not only "maximize those benefits" (P13), as suggested by this student, but also attain career goals afforded by an advanced degree.

Influence on survey

Participants were specifically asked what types of questions should be asked to learn more about the potential influence military service has on career decision-making. Several participants suggested using a sequential strategy. The first step would be to establish the participant's current and long-term academic and career goal(s). The second step would be to ask

about how they perceive their military experience, including their military occupation, as influencing their goals. In this way, individuals can more easily recall how their current and/or future academic and career goals may relate to their military training. Based on this feedback, items such as, “Which of the following best describes your current academic goal(s)?” and “What are your long-term goals?” appear first in the survey.

To better understand the influence of a participant’s military experience on their career decision-making, most participants suggested asking students directly how their military experience related to their current academic goals. Items about their military experience, “Upon separating, what was your Occupational Specialty (i.e. MOS, AFSC)?” and “In what ways, if at all, did your military experience influence (or change) your academic and/or career goals?” aided respondents in thinking about their military experience with respect to their current academic and career goals.

4.2 Research Question 2

What resources are student veterans using to support their educational and career development?

Participants described benefitting from a range of career-related resources ranging from independent use of the internet to formal interest and aptitude testing by professional career counselors. For many in the sample, especially those in graduate programs, departmental advisors, career-related advice from faculty, and departmental networks were most influential in their career decision-making. Several participants, particularly those in graduate programs, described, “sitting down with faculty advisors, letting them know what [their goal was] and then having them help [the students] figure out how to map that goal and navigate it” (P12) as the most influential decision-making strategy. Another student discussed the emails and networking

that is done within their departmental “home”. They recalled, “get[ing] two or three emails a week from that group that offers up practicums or internships for students.” (P9) This sentiment was echoed by another student who reported that their “[specific graduate program] has been the most helpful.” (P2)

Several participants in this sample described taking a self-directed and pragmatic approach to career development. These students preferred using independent research of labor markets, short and long-term job prospects, and perceived utility or transferability of a career field as the basis for career-related decisions. For example, one participant described deciding to pursue a major such as business or economics because such a major would “allow me the ability to choose where I wanted to go...a safety net major.” (P13) Another student reported choosing a communication degree because she felt the major was “well-rounded.” (P5) Yet another student described that independent labor market research, including specific job requirements, revealed career paths perceived by the individual to be not as competitive to enter or otherwise lacking in job applicants. One student, interested in teaching, described becoming interested in teaching at the community college level after research revealed “…a great need for it.” He said, “some of the local community colleges actually don't offer some of the classes because they can't find enough teachers.” (P7) Another student reported choosing a field following a similar labor market analysis. He chose to pursue the study of Geographic Information Systems after conducting “a lot of research to find out, you know, that there's good job projection and all that so I was like, ‘Yeah, this seems like a good fit,’”. (P6) Still another student became interested in a career field somewhat accidentally: “I kind of thought I wouldn't really like being a teacher because I would get stagnant and that would drive me nuts… [and, after researching] … “other jobs that involve mentorship that have change…ended up stumbling onto high school counseling.” (P12)

Participants in this sample also described relying on their family and friends in making career decisions. One participant recalled choosing to avoid a potential career upon witnessing his spouse "go through the nursing program…and I'm really glad I didn't [pursue nursing]". (P12) Similarly, another student cited his family's involvement in "30 plus years in Construction Management," which led him to decide to switch [his] major to Construction Management. (P4) Familial obligations, such as spousal employment and access to personally acceptable education for their children, was also expressed. One participant discussed being stationed in Washington previously and completed coursework at University of Washington during his military career. His family's decision to relocate to Seattle once he retired "was influenced entirely by my desire to go back to what I was trying to do [at UW]." (P8)

Mandatory pre-separation counseling on academic and career planning

Participants were also asked about the mandatory pre-separation counseling they received as part of their discharge from military service. Only two of the thirteen participants reported it being helpful. Resume development, resource identification (in the form of brochures), and skills in finding "basic [federal] jobs" (P13), for example, were among the most common positive comments about the counseling they received. However, most veterans expressed that a major challenge with the counseling was that it did not appear to be individualized. One student expressed frustration about the way their individual interests were not considered when stating, "I'm not interested in [military dining facility] operations, you know? It was almost like too systematic. It was like there was no -- there's no room for like individuality." (P2) This participant went on to argue for a more individualized approach. They said, "I would have wanted somebody to first ask me like what my goals were and to then actually help me reach my

goals as opposed to ask me what my goals are and then just give me a bunch of token shit [sic]". (P2)

The lack of individualized attention, given the variability of options and academic contexts available, was felt acutely. For example,

> There's nothing that's even major field specific until -- like it's just you're going to college, so you are going to be a college student. You're put in this track. So that's anyone from engineering who has never been in college before to someone who has got, you know, a graduate degree done and trying to pursue a master's straight from there. And so it's very -- it's an overview. It's not -- like I didn't get anything out of it. (P1)

Interestingly, most of the participants described the mandatory counseling as a perfunctory act with little genuine thought or care and used similar language to describe it as, "a check in the box, so that they could kick you out and say good luck." (P6) The systematic approach to this counseling was seen by one student as, "military's way of just checking up on us and, 'Yeah, we provided them with these XYZ services. So, if anything after this, it's their fault if things don't work out for them.'" (P13) For others, the lack of personalized attention strengthened their desire to "check the box and get out and do -- and not pay attention." (P1)

For some in this sample, the specific culture of the unit they were assigned to seemed to have a large influence on their perception of the utility of the transition counseling process itself and of exiting the military in general. One student expressed a level of manipulation he observed when separating:

> A lot of the senior enlisted felt…[we] couldn't be successful in the civilian world, and so, they directly say that to you like…'Oh, you're not going to get a job, you're not going to be able to support your family, you're not going to have health care for your kids. Where

> else are you going to have health care for your kids? You're not going to get that out in the civilian world. Do you even know what the unemployment rate in the civilian world is? (P4)

For Reserve and National Guard units, the experience of separation and counseling seemed much different than for active duty service members. One participant said, "[T]hey just expect you to find that stuff on the Internet… Or they really hope that you have at some point in your career met the right person who said, 'Oh, by the way, you know, lessons learned. Here you need to go do this.'" (P9) There also seems to be an assumption made about the "part-time" nature of these units. One student remembered, "When I got out the first time, you know, there really wasn't any [counseling]. I guess the assumption is, like, oh, okay if you're getting out, like, you already have a civilian job." (P6) Another student described the limited time she had to think about separating, given the commitment of her full-time position. She explained,

> [A] reservist who's working a full-time job and also then working their military job, as they go to retirement, they're not given that opportunity, paid time to learn how to ensure that all your I's are dotted, and your T's are crossed. So many, many, many of our reservists have retired without even processing paperwork for disability. Now you know, the fact that there's that big difference, you have reservists that have PTSD, that have service-connected disabilities, or at least service-related accidents in line of duty (LODs), that they have, but they haven't gone down to the VA Disability Center to input them and process them. There's no mentor, if you will, or advocate taking reservists like myself through this process. (P9)

Influence on survey

The 13 interviewees reported utilizing over 27 different career-related resources. These resources were summarized and included as 10 response options, to the survey question, "Which of the following academic and career-related resources, other than pre-separation counseling, have you utilized?". Although participants in this sample generally did not find the military-sanctioned separation counseling helpful, many expressed the importance of asking questions about individual's experiences and ways it could have been more effective. Items such as "On a scale of 1 to 5, how effective did you find the pre-separation counseling or transition assistance you received offered through the military?" and "In what ways could your experience with pre-separation counseling been improved?" were included in the final survey.

4.3 Research Question 3

For those student veterans who identify as having a service-connected disability, what impact do they perceive their experience of disability, if any, has on their self-efficacy with respect to career decision-making?

Influence of service-connected disability on decision-making

Eight of the thirteen participants indicated they had a service-connected disability. When asked about the perceived influence service-connected disability had on their academic and career decision-making, three reported that their disability afforded opportunities to think systematically about academic and career interests they might otherwise not have had. For example, being eligible for services through the military such as access to social workers or other rehabilitation professionals because of their disability provided additional resources that were not available to those without disability. One benefit, Vocational Rehabilitation and Employment (VR and E), was identified by several of the participants. VR and E benefits are available to only those with a disability rating of at least 10% (VA, 2016). One student described their VR and E

counselor as “the only really helpful person…the only person that I still communicate with and I still keep in contact with and still learn things from.” (P2) Another student (P12) described the process of looking at various options she had, including having VR and E assist with financing her education, as particularly helpful to finding the career trajectory that best fit her needs.

Service members whose disability precluded them from actively participating in the rigors their work required were physically separated from their unit until they could safely be returned to their assigned unit or medically separated from the military. For some, this determination process may take months to complete. Two participants described various “benefits” such separation afforded them and the influence it had on their academic and career decision-making:

> Because I had a back injury, I was at -- placed, I liked work at the Rec Center, so that gave me a world of opportunities. I went to community college, so I was continuing to pursue my education while I was still in the Marine Corps. That would not have been possible if I had been like, remaining on training and active in the Infantry, they just, they don't allow it. (P4)

The other student discussed her time being placed in a Warrior Transition Battalion (WTB), a specialized unit that provides comprehensive transition assistance to injured soldiers, as being essential to her academic and career decision-making:

> [I had] access to an occupational therapist and like a few different counselors and stuff and I mean the WTB tries to just consolidate all of those resources in one place and basically mandates that you have an appointment with them once a month and you set goals and you do -- there's a lot of like structural -- you know, counseling in there. So, they really do a lot and they have very systemic approaches to it too, you know, so like

> you and your occupational therapist set up goals for like six different tiers of your life like your family and your -- you know, yourself, then your, like, medical stuff and you know they have a really, it's almost like too much, you know? But I am positive that nobody outside of WTB gets that type of handholding. (P2)

Influence on survey

The interviews revealed the importance of disability as a potential factor influencing student's goals, including their self-efficacy and career-related resource utilization which warranted its inclusion in the survey. Physical access to medical care, for instance, was critically important for at least one student in this sample. Specifically, behavioral health services offered on campus and the extensive network of comprehensive healthcare and "presence of resources" offered within the greater Seattle area were cited as being influential in their educational choice. Items such as, "Do you have a service-connected disability?" and "If so, what is your disability rating?" were included in the survey. For those who indicate having a disability, the question "In what ways, if at all, did your service-connected disability influence (or change) your academic and/or career goals?" was asked to better understand their perspectives of their disability with respect to academic and career decision-making.

Other important military-related data

In terms of demographic data collected in this study, in addition to age, gender, and class standing, one's military rank (i.e. the potential for greater exposure to responsibility, leadership, and self-efficacy) was considered by the interviewees as an important factor. One participant described the process of exiting the military was made easier by virtue of his military rank. Another participant, a lieutenant colonel, conceded that addressing all of the requirements for separating from the military may have been easier for him than for other, lower ranking, military

members. He said he had the ability to say, "'I'm going to do this' and nobody's going to stop me for this kid whose been in for, enlisted kid whose been in for three years, it can be a lot more challenging. He's got several layers to go through to get out." (P8) As a result, the item "Which option best describes your most recent military rank?" was included.

Finally, exposure to combat was identified as a potential influencer of one's career development for several reasons. For instance, for those whose military occupation involved combat arms were said to frequently, "end up going into security work…police or fire fighting" (P1). Another participant described veterans who experienced combat as having a unique identity within the military and as distinct as experiences between "male veterans, female veterans, [or between different] service" (i.e. Army versus Navy versus Marine, et cetera). (P3) One participant suggested including a question about combat experience because of the differences that may exist between those who experience combat and those who do not. Recounting his own experience, he said "I did not see any extreme combat or anything that I guess maybe you would deem as traumatizing or traumatic. You know, no firefights, no deaths, no anything to that level…I'm sure a lot of people that were in the military, some, a big chunk deployed, and a good chunk did but not to hostile areas." (P13) Other practical differences described by these participants such as the toll of long and frequent deployments, the difficulty inherent of living abroad for service members and their families, and the reduction in capacity to network or pursue higher education in such environments, could potentially influence their career decision self-efficacy. As such, the item "During your military service, did you serve in combat?", with the response options "yes" or "no", was included in the survey.

Recommendations from student vets

Although not directly related to the research questions, during both phases of this study, participants were asked to offer recommendations to other service members who were separating from the military and exploring academic and career options. Several areas were identified. Financial considerations, for example, were cited as being of primary importance. Taking advantage of community colleges, for instance, both as a cost saving measure given the 36-month academic allowance currently offered as part of the GI Bill, as well as the opportunities such an environment provides to explore potential career interests. Similarly, other participants highlighted that although offering some income, the GI Bill should not be considered one's only source of revenue. They recommended that service members become financially stable before embarking on an educational path. Additionally, starting to plan far in advance of one's separation from the military was also seen as important. This included getting connected to the VA, talking with other recently separated veterans and going back to school. For many of the participants, the insights they received by speaking to former service members attending school included discipline specific knowledge and cultural realities as well as information about certain majors, were particularly helpful.

Chapter 5: Results (Phase II)

The purpose of Phase II of this study was to gather information from a wide group of veterans with and without disabilities who are enrolled in higher education about career decision-making and their perceptions of the influence of their military service and service-connected disability on that process. In addition to a survey designed for this study, participants were asked to complete the Career Decision Self-Efficacy Scale Short-Form (CDSE Scale; Betz, Hammond, & Multon, 2005; Betz & Klein, 1996), an instrument for assessing the self-efficacy or confidence of respondents in making academic and career decisions. This chapter includes a general description of the participants of Phase II of this study. Distributions of gender, age, and educational attainment as well as participant military status will be discussed. Next, student veterans' career decision making self-efficacy, as measured by the CDSE, will be described and comparisons will be made between the three variables mentioned. Finally, career-related resources utilized and reported by this sample will be described.

Description of Participants

A total of 128 individuals, representing six (6) different institutions in the Pacific Northwest (University of Washington-Seattle, Bothell, and Tacoma; Pacific Lutheran University; Western Washington University; and Eastern Washington University), responded to the online survey. One participant chose not to answer questions related to the CDSE and was subsequently excluded from the analysis. A total of 14 individuals (11%), indicated they were not currently enrolled in school but were included in the analysis as it was unclear whether their absences were temporary or permanent.

The sample included 75 males (59.1%) and 48 females (37.8%). Two participants (1.6%) identified as either "Transgender" or "Other". The mean age of respondents was 33.5 years,

ranging from 19 to 64 years. Most respondents (80.4%) reported they were upperclassmen (juniors, seniors, or graduate students). Table 2 provides a description of the participants demographics.

Table 2

Demographic Characteristics of the Participants, Phase II

Variable	Number of Participants	Statistics
Gender	N=127	Males= 75 (59.1%)
		Females= 48 (37.8%)
		Other= 2 (1.6%)
Age	N=122	Mean= 33.49
	(5 missing)	Mode= 30
		SD= 8.56
		Range= 45
Class Standing	N=127	Freshman= 3 (2.4%)
		Sophomore= 8(6.3%)
		Junior= 34(26.8%)
		Senior= 33 (26%)
		Graduate= 35 (27.6%)
		Not Enrolled= 14 (11%)
Military Status	N=127	Active Duty= 7 (5.5%)
		Veteran= 95 (74.8%)
		Reservist= 12 (9.4%)
		National Guard= 7 (5.5%)
		Other= 6 (4.7%)
Rank	N=127	Enlisted= 39 (30.7%)
		Officer= 88 (69.3%)
Presence of Disability	N=127	Yes= 87 (68.5%)
		No= 40 (31.5%)

Most participants (74.8%) endorsed being a Veteran, although this number is likely slightly higher as an additional 4.7% reported “other.” Responses to “Other” included “Retired” or both “Veteran/Reservists”, for those retiring from active duty and entering other military

roles. As such, they were not included in either Veteran or Reservists category. The next most commonly reported status was Reservist (9.4%). The sample also included a percentage of both students who indicated they were Active Duty (5.5%) or in the National Guard (5.5%). The participants were separated into two groups: officers (69.3%) and enlisted (30.7%). The officer group included Non-Commissioned Officers (NCOs) and Warrant Officers. The majority of participants (68.5%) reported having a service-connected disability.

Similar to the analysis of the qualitative data in Chapter 4, the analysis of the primarily quantitative survey data was guided by and organized around the three overarching research questions.

5.1 Research Question 1: CDSE-SF

The 25-question version of the CDSE-SF asks five questions for each of the five subscale areas, and respondents rate their confidence level from 1 (No Confidence at All) to 5 (Complete Confidence.) Scores are tallied and averaged for each subscale and averaged overall for a total score. Scores range from 25-125 for the total score, 1-5 for each of the subscales, and should be interpreted relative to their prediction of approach versus avoidance behavior. High self-efficacy or confidence levels between 3.5-5 predicts approach behavior, while low self-efficacy levels (1-3) predicts avoidance behavior. Student veterans in this study displayed high CDSE scores indicating "much confidence" overall in their perceived ability to approach tasks associated with making a career decision. As illustrated in Table 3, the mean score for self-appraisal, occupational information, goal selection, and planning all scored above 3.5.

Table 3

Descriptive Statistics of Total and Subscale CDSE-SF Scores (n = 127)

CDSE-SF	M	SD	Range
Total Score	101.6	15.6	91
Subscale			
Self-Appraisal	4.1	.68	3.6
Occupational Information	4.3	.67	3.4
Goal Selection	4.1	.73	3.6
Problem Solving	3.9	.74	3.6
Planning	4.0	.75	4.0

To assess score differences for student veterans who share characteristics of interest in this study, total and subscale scores were examined in terms of three independent variables: (a) presence of disability, (b) combat exposure, and (c) military rank. To do this, independent samples t-test, an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups, was used. The intent of this comparison was not to suggest causation or make predictions, but rather to explore the data more fully and provide a basis for further research leading toward service and/or policy initiatives. For each of the groups compared using the independent sample t-test, the N in each group was adequate and Levene's test for homoscedasticity was not significant at .05.

The first variable, presence of disability, reflects research that identifies disability as an important contextual factor that may directly affect self-efficacy as it relates to career decision

making. To examine whether differences exist between one's career decision-making self-efficacy and disability, mean total CDSE scores as well as each of the five sub-scores were compared using independent samples t-test, with *p* values set at .05. Results of this analysis, summarized in Table 4, indicated no statistically significant differences in the total scores between students with disability (*M* = 20.1, *SD* = 3.34) and those without disability (*M* = 20.9, *SD* = 2.49) conditions; *t*(125) = 1.36, *p* = .169. The Planning subscale indicated a statistically significant difference *t*(125*)* = 2.27, *p* = .025.

Table 4

Comparison of Means, Presence of Disability

	Disability n= 87		No Disability n = 40		
CDSE-SF	*M*	*SD*	*M*	*SD*	*p*
Total Score	100.3	16.7	104.4	12.4	.169
Subscale					
Self-Appraisal	4.0	.74	4.1	.52	.435
Occupational Information	4.2	.69	4.4	.63	.225
Goal Selection	4.1	.79	4.2	.55	.391
Problem Solving	3.8	.77	4.2	.64	.356
Planning	3.9	.78	4.2	.64	.025

The next variable, combat exposure, was chosen due to research supporting the numerous potential influences on career self-efficacy, positive and negative, for individuals who experience combat (Church, 2009; DiRamio & Spires, 2009). Findings of this analysis (Table 5) indicated no statistically significance difference in the CDSE total scores for participants who reported they had combat experience (M = 19.9, SD = 3.16) and those who did not have combat experience (M = 20.73, SD = 3.03); $t(125) = 1.34$, $p = .184$. No statistical significance was found for any of the subscales.

Table 5

Comparison of Means, Combat Exposure

	Combat n = 71		No Combat n = 56		
CDSE-SF	M	SD	M	SD	p
Total Score	99.9	15.8	103.7	15.1	.184
Subscale					
Self-Appraisal	3.9	.70	4.2	.65	.196
Occupational Information	4.2	.70	4.3	.63	.416
Goal Selection	4.0	.71	4.2	.74	.088
Problem Solving	3.9	.75	3.9	.74	.539
Planning	3.9	.76	4.1	.73	.169

Given potential differences in educational attainment, leadership experience, and time in military service which may influence CDSE (Brock, Wick, Evans, Gianola, 2011; Gravely, 2012), military rank was chosen as the third variable. No statistically significant differences were detected between total scores of enlisted (M=20.56, SD=3.23) and officers (M=20.21, SD=3.07); t(125)=.579, p = .564, or any of the subscales. See Table 6.

Table 6

Comparison of Means, Military Rank

	Officer n = 88		Enlisted n = 39		
CDSE-SF	*M*	*SD*	*M*	*SD*	p
Total Score	101.1	15.4	102.8	16.2	.564
Subscale					
Self-Appraisal	4.1	.67	4.1	.70	.727
Occupational Information	4.3	.67	4.3	.68	.832
Goal Selection	4.1	.68	4.2	.83	.319
Problem Solving	3.9	.74	3.9	.75	.541
Planning	3.9	.78	4.0	.70	.763

High scores indicate participants are confident in their ability to perform the activities necessary to make career-related decisions. These students are predicted to be capable of approaching career decision-making confidently across all five measures hypothesized to facilitate good career decisions (Betz & Hackett, 2006; Crites, 1978).

5.2 Research Question 2: Utilization of Career Resources

Using the list of resources identified as being used by interviewees in Phase 1, summarized into 10 response options including "Other", participants in Phase II were asked to identify which career-related resources, on and off campus, they have used (Table 7). Participants could choose more than one item. Students who selected "Other" were asked to write-in a resource used but not listed. The resources listed by participants under the "Other" category are listed in Table 8.

Table 7

Utilization of Career Resources

Resource	n	Response %
Family and friends	78	61.4
Independent research (e.g., labor market inquiry, informational interview)	72	56.7
Online resources for veterans	62	48.8
Post/Base education and/or Career Center	48	37.8
Completed skills assessment and/or interest inventory	44	34.7
Formal career counseling with professional counselor (military or civilian)	43	33.9
University or military-sponsored job fair(s)	38	29.9
Other	37	29.1
None	15	11.8
Warrior Transition Unit	3	2.4

The three resources most commonly used by this sample included “Family and Friends” (61.4%), “Independent Research” (56.7%), and “Online Resources for Veterans (48.8%). Although more formal resources were used (e.g. professional career counseling – 33.9% and skills assessments – 34.7%), most respondents preferred independent, self-directed career development and a reliance on family in making career-related decisions.

Table 8

“Other” Career Resources

Resources	
University-related	Military-related
1. Departmental resources (i.e. alumni, listserv)	7. Vocational Rehabilitation and Employment (VR and E)
2. University Center for Teaching and Learning	8. Education office on base
3. Career services through UW	9. Disabled American Veterans (DAV)
4. Other student veterans	10. Student Veterans of America (SVA)
5. Disability Resources for Students (DRS)	
6. University Veteran’s office visits	

As mentioned, all Active-Duty military members are required to participate in a pre-separation transition process before they can separate from their branch of service. Due to the mandatory nature of the pre-separation counseling received by all Active Duty exiting service members, participants in Phase II were asked to rate the helpfulness of the transition counseling they received on their career decision-making on a scale of 1 to 5. Of the 127 participants, 124 responded to this survey item. Results indicated that 42 individuals (33.1%) perceived their program was “Not at all helpful”. Only 22 (17.3%) participants reported finding the assistance provided either “Extremely helpful” or “Very helpful” (see Figure 1).

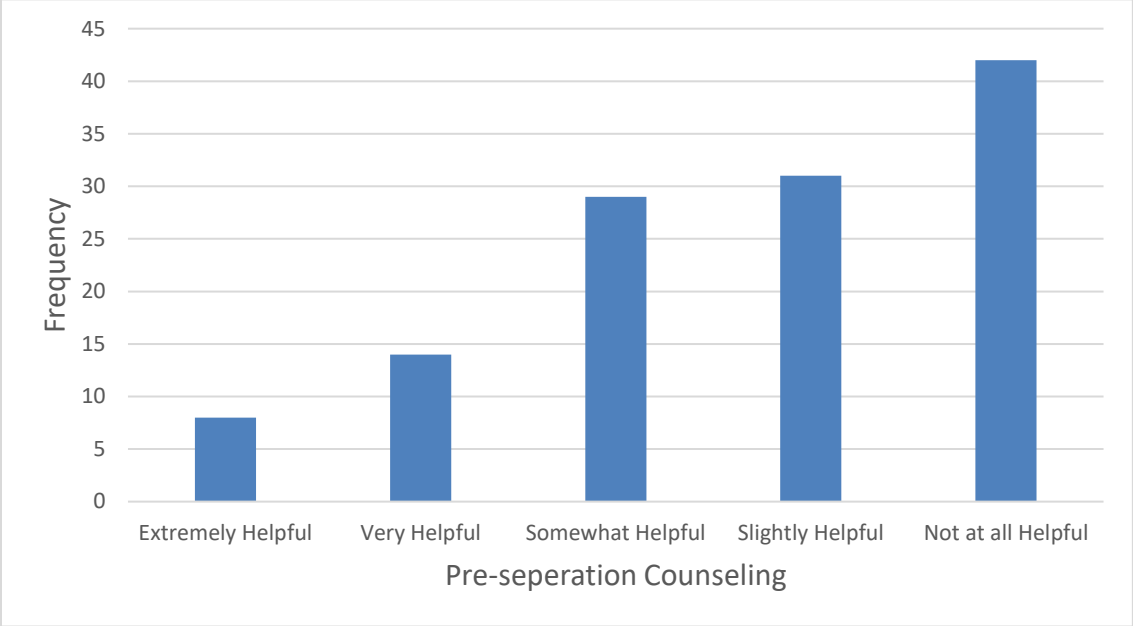

Figure 1 Perceived Helpfulness of Military Transition Counseling

Additionally, participants were asked to describe ways in which their experience with this transition assistance could have been improved, if at all. Analysis of participants written comments on the survey illuminated their experiences. Many cited the lack of specificity being particularly unhelpful. For example, one student said, "Make it more specialized. Job hunting/going back to school is so person dependent and specific." (P44) "[Make it] more tailored rather than so general, because everyone's circumstances are extremely different." (P57) Interestingly, similar to findings in phase one of this study, several participants described the resource as "a check in the box". Other students cited a lack of emphasis on or specific information about accessing colleges or the GI Bill as a frustration. One student commented, "Commit more time to academics, GI Bill, and finding a career as opposed to finding a job." (P133) Another student said, "It would have been more helpful to receive information on specific processes (e.g. more specific information on accessing Post 9/11 GI Bill benefits)." (P51) Still

others felt the process was too rushed and that they were, “not given enough time to properly transition.” (P114)

While individuals are required to participate in these transition programs upon separation, six survey respondents reported not remembering receiving or receiving little in terms of counseling upon separating. For example, one participant said, “I literally got my out-processing paperwork signed. Nothing more. I had no idea they actually sat down with you and discussed anything”. (P134) Another veteran described his counseling a little differently, “I was basically told not to beat my wife and not kill myself. That was my separation counseling coming off of [active duty].” (P130) Two veterans reported having other responsibilities that precluded their participation in such activities (i.e., due to the demands of ones’ position or because of participating in medical evaluations to assess their ability to continue with military service).

5.3 Research Question 3: Influence of Disability

The 87 students who reported a service-connected disability were asked in the survey what influence their disability had, if any, on the decisions they made regarding their academic or career development. Of these, 65 (74.7%) chose to respond. Of those who did respond, half (50.8%) perceived their disability as having little or no influence on their career-related decisions. For others, however, the impact of disability on their academic and career paths after military service was profound. For some individuals (18.4%), changes in physical function, given the physical nature and demands of both their previous career and planned trajectory, were identified as most influential in their career development post military service. One participant said, “I avoided careers that included physically demanding work.” (P48) Another participant needing to choose a different occupation as a mechanic “due to physical ailments… so my thoughts shifted to a more office-oriented job.” (P73)

For many of these individuals, pursuing higher education, for instance, represented the fastest path towards a work environment more accommodating of their new physical limitations. One participant commented, “Because of my disability, I can't do anything that will require a lot of physical capabilities. That's why I chose a computer degree.” (P77) Another participant chose to further their education because of the, “few physical and psychological demands that would come with only a bachelor's in my profession.” (P90) Other physical demands of work including lifting and bending were described as difficult for one participant who said such requirements “helped…push [me] towards Management/Leadership positions.” (P103) This sentiment was echoed by another participant who said that their, “joints cannot keep up with some of the loads that were required of me when I was a Mechanic.” (P107)

In addition to adapting to changes to physical function, several participants (6.2%), referenced changes in their cognitive abilities as the most important influence on their academic and career decisions. One participant said her, “ability to retain information [had] been diminished” and as a result she did not have, “patience for anything that trigger[ed]” her. (P83) Another participant lamented that their, “memory problems and overactive amygdala which results in expression of emotion during inappropriate times inhibits my job prospects and my ability to maintain employment in a professional setting.” (P40)

Other respondents explained ways in which disability affected their ability to pursue a full career in the military. Disability prevented one participant, for instance, “from going back in to be an officer, physically could not continue.” (P123) Vocational goals, for another participant, “all involved the military, so all new goals [were] in a non-physical area.” (P131)

Two participants referenced the access gained to the VA's Vocational Rehabilitation and Education program as being responsible for their career development. This resource, and its myriad of career services including job training, employment accommodations, resume development, and job seeking skills coaching, is only available to those with a service-connected disability. For instance, one participants said, "my disability allows me to use Vocational Rehab and pays for my education in nursing. I would not be able to afford my education without the disability rating." (P86)

Chapter 6: Discussion

This chapter integrates findings presented in Chapters 4 and 5 with past research and uses data derived from both phases of this study organized around the three overarching research questions. The results of this study both confirm and identify important tenants and implications for theory, research, and practice. These will be discussed next followed by limitations and future directions.

The first research question utilized an existing instrument to examine the differences of three subgroups (i.e. participants indicating combat exposure, enlisted versus officer service members, and those who self-reported having a service-connected disability) on self-efficacy as it relates to career decision-making.

No differences, with respect to Total CDSE scores, related to combat exposure, one's status as Officer or Enlisted service member, or disability status were found. Interviewees in Phase 1 and responses to short answers in Phase 2 provide a more nuanced understanding of the context of career self-efficacy. For instance, interviewees described stark cultural differences between the value placed on education by officers where education is a pre-requisite for advancement, and enlisted service members. Although differences in educational attainment often differentiate enlisted service members from officers upon entry into the military, military service also provides structure, expectations, and training, and historically, has been viewed as a "test" of bravery for its members (Hall, 2011). The cultural ethos and process of initiation as a "warrior" may facilitate both increases in abilities and confidence which, in turn, may provide opportunities for service members, regardless of rank, to acquire performance accomplishments, posited as the strongest source of self-efficacy development (DiRamio, Ackerman, & Mitchell, 2008; Betz, 1992).

Interestingly, differences between participants with and without service-connected disability were statistically significant on one of the subscales, Planning. Career planning is thought of as the perception that an individual can identify the information needed to plan logically and chronologically for the future (Taylor & Betz, 1983). Participants with service-connected disability reported to be less confident on items such as, "Make a plan of your goals for the next five years", and "Identify employers, firms, and institutions relevant to your career possibilities". The difference in self-reported confidence in completing tasks associated with career planning may relate to an individual's uncertainty of how disability may affect their career decision-making processes, including career exploration and planning, relative to their non-disabled peers. For participants with disability, such uncertainty and lowered capacity to plan for a career could lead to avoidance of that behavior and, potentially, negatively impact future employment outcomes (Bandura, 1977; Hitchings, Luzzo, Ristow, Horvath, Retish, & Tanners, 2001; Cummings, Maddux & Casey, 2000; Luzzo, Hitching, Retish, & Shoemaker, 1999).

A comparison of scores obtained in this study with those in prior studies shows relative to college students in general (Betz, Hammond, & Multon, 2005), including students with disabilities (Luzzo, 1999), participants in this study scored as high or higher on each of the five subscales of the CDSE. Participants' responses were similar to those of people who are willing and have the confidence necessary to engage in behaviors to successfully make career-related decisions (Bandura, 1977; Lent; Brown & Hackett, 1994). These include the assertion that an individual can successfully appraise their own career interests; identify and evaluate information related to their career interests; set and persist in career-related goals; align current and future plans necessary to meet those goals; and problem solve accordingly in order to succeed in their educational and career-related aspirations (Crites, 1978; Betz & Taylor, 2006; Taylor & Pompa, 1990; Luzzo,

1999; Peterson & delMas, 1996; Gravely, 2012). Participants reported as much or more confidence in their academic and career decision-making than demographically similar peers (Betz, Hammond, & Multon, 2005).

The second research question was designed to identify career-related resources and utilization of these resources by student veterans. Participants in this study reported that they used a variety of different career-related resources in making decisions about their future goals. The findings provide a snapshot of a group who appear willing to explore career options with a wide range of professionals including career specialists and faculty who were viewed as particularly helpful. Graduate students, in particular, reported relying on faculty in their career development.

The participants also described their willingness and ability to engage in career exploration independently, choosing to search the internet and other web-based career resources for veterans as the primary source of information about future careers. Despite having access to both online and other professional career-resources, most individuals in this sample self-reported also relying on family and friends in making career-related decisions. This finding is consistent with literature suggesting that familial support may relate positively to higher levels of career decision-making self-efficacy (Aycan, 2006; Skorikov, 2007; Whiston & Keller, 2004). Furthermore, the encouragement and practical assistance family support may provide has been found to develop and sustain career-related outcome expectations for college students. Familial assistance focused on positive goal setting behavior for instance by setting smaller goals toward making positive career choices, is considered a critical component of career decision-making and career attainment (Restubog, Florentino, and Garcia, 2010; Betz, 1992; Fabian, 2000; Lent & Brown, 1996). This finding also supports research that identified social support provided by family as being favored by nontraditional students transitioning to new careers (Quimby & O'Brien, 2004).

The fact that the highest percentage of participants preferred a self-directed search, relying on independent research and online resources for choosing a career, was not surprising, given the rise in prevalence of online resources and a comfort with technology this generation of soldiers enjoys (Ruh, Spicer & Vaughan, 2009). Through speaking to student veterans during Phase I, and as evidenced through responses to the survey in Phase II, older student veterans, especially those in graduate programs, are also comfortable engaging with their academic department through specific career-related conversations with faculty, online job boards and other related resources managed within their department, or job fairs hosted departmentally or within the college. This supports research suggesting that people who are older, such as student veterans, relative to "traditional" college students, are resourceful and skilled in obtaining career-related information which may positively impact their career-decision making self-efficacy (Chang & Logan, 2005; Smith, et al., 1997).

The third research question specifically addressed potential influences service-connected disability may have had on informing career choice. No differences in CDSE were reported between two subgroups. Based on both the interview content in Phase 1, and short answers provided in Phase II, although participants with disability were efficacious about making decisions, they may feel that their decisions are constrained or otherwise influenced by disability-related experiences. These findings are consistent with the relevant literature suggesting that there are differences in factors that influence career decision-making of student veterans with disabilities as compared to student veterans in general (Lent et al., 1994; Wheeler, 2012; Green & Hayden, 2013). For instance, as noted in the current research, military veterans with disabilities may gain access to programs and services not available to other service members. Access to additional professional resources (i.e. rehabilitation counselors, social workers), was described by

participants in both phases as providing not only vocational expertise, but also the time, and, in some cases, additional financial resources, to think systematically about career interests and related aptitudes. Additional time was also useful in the planning required to embark on a new career path more suitable to their interests and abilities. This finding is consistent with Dipeolu et al. (2002) who found that college students with disabilities, including learning disabilities, reported having a comprehensive and well-coordinated support network related to both academic and career decision-making and that such support may mitigate some of the negative outcomes or barriers related to their disability described by participants in the current study. While many students, including veterans, face career issues at various times during their career development on college campuses, the supports available to students with disabilities, including those that target career decision-making, may be unknown to or less well integrated for those without disability.

Although respondents with disabilities reported having sufficient confidence to make career decisions, they also described issues which may have an impact on their career development progress. For instance, the participants interpreted the onset of physical or psychological manifestations of disability, as academic and career barriers. Adapting to changes in physical and cognitive functioning, such as increases in pain, attenuated concentration, and issues related to memory, reported by participants who indicated having disability in the survey, may make planning for the future difficult. Uncertainty and unpredictability of how new deficits may manifest in academic or vocational environments may further complicate planning for future careers. Many participants indicated that they were no longer able to perform the physical tasks, nor had the stamina to pursue the physically-taxing work they had been both trained in and expected to return to post military service. For some, the perception of disability-related limitations precluded them from considering occupations that may have been of interest in favor or choosing

vocational paths thought of as more suited to their disability status. This finding is supported by research suggesting that students with disabilities are more likely to report external forces (i.e. forces beyond personal control) as being responsible for career-related outcomes than students without disability (Luzzo, Hitchings, Retish, & Shoemaker, 1999; Dipeolu et al., 2002). For some, this included attributing career-related outcomes to their disability. In this way, an individual may assume a career path is unattainable due to their disability and may be less likely to explore accommodations or their legal, employment-related protections in their career exploration and planning. Further research is warranted to both better understand the relationships between the influence(s) of disability on career development, including career planning, of this population, as well as to identify perceived disability-related limitations and what legal and compensatory strategies might be available.

6.1 Implications

The findings from this study provide a basis for several implications for theory, research, and practice. Each is addressed briefly.

Theory.

Social Cognitive Career Theory (SCCT) (Lent et al., 1994, 2000) served as the primary theoretical foundation for this study. The study findings, particularly for those related to the experience of disability discussed by participants, offer supportive evidence for this theory, and suggest some new conceptual links as well as additional areas of inquiry.

Social Cognitive Career Theory

Findings of the current study provide additional evidence supporting the potential influences personal and environmental factors may have on career development found in the literature (Albert & Luzzo, 1999; Lent & Brown, 1996; Chartrand & Rose, 1996; Swanson &

Woitke, 1997). For example, Lent and Brown (1996) found factors such as those related to a person's disability (e.g., age of onset, severity) and one's environment (e.g. family background, cultural context) help shape an individual's learning experiences and thus levels of self-efficacy with respect to career decision-making, which can directly influence behavior. SCCT further supports the idea that one's disability status and shared experiences (e.g., military service) increases the understanding of the context in which career choice behaviors are formed. Furthermore, individuals' learning experiences, opportunity structures, and performance and outcome expectations are necessarily part of their efficacy beliefs. In turn, these beliefs have a reciprocal effect on behavior and, ultimately, career decision-making (Bandura, 1986; Lent, Brown, & Hackett, 1994, 2000; Betz & Klein, 1996; Fabian, 2000). The context related to these experiences described qualitatively by participants, provides additional support for the strong career self-efficacy demonstrated by this sample.

Research.

This study contributes to the research literature by exploring the perceived impact of disability, including potential barriers to career development these students may encounter, and how these experiences may influence career decision-making. A number of pathways for future research emerged as a result of these efforts, including the use of specific research designs, development and challenges in data collection and measurement, and strategies to mitigate such challenges are discussed sequentially.

Research design.

To the knowledge of this researcher, only one other study has been conducted specifically addressing career self-efficacy of student veterans (Gravely, 2012). Gravely utilized a survey, which included the CDSE-SF, to better understand both utilization of career resources as well as

career decision-making self-efficacy. One of the primary contributions of the present study is the use of mixed methods. Using both qualitative and quantitative methods, the current study provides additional context not found in other research efforts studying career decision-making self-efficacy issues across various populations. Asking student veterans to help identify questions and sharing experiences salient to the population under study was important to thoroughly address the research questions and the complexity inherent to career development (Luzzo, 1999; McWhirter, 1997). The qualitative data aided understanding of the construct of career self-efficacy within this population by providing context to the CDSE scores and informing interpretation. For instance, the role disability may play in influencing career development for student veterans, while supported within the literature, would not have been elucidated within the context of participants' unique experiences without employing qualitative methodology. Likewise, specific challenges related to changes in cognitive and physical function, and the utility of disability-related career services, like Vocational Rehabilitation & Education (VR & E), may not have been identified without offering opportunities for individuals to discuss via interviews or short answer survey response items. Future research efforts could benefit by adding similar depth and context that mixed methods provide, to understanding the construct of career decision-making self-efficacy within other veteran populations, including college students.

Future studies would also benefit from using enhanced recruitment strategies to increase sample size. Recruitment for this study was restricted due to privacy protections afforded under Family Educational Rights and Privacy Act (FERPA). Although protecting the privacy and anonymity of student veterans was of paramount importance at every stage of this research, implementing strategies to adhere to FERPA and reach a greater number of veterans on campus

could increase both participation and representation in future research. For example, although all recruitment sites were asked and reminded to send the survey to potential participants multiple times and at various points during the recruitment period, the timing, adherence, and mediums used to fulfill this request varied across universities. Without having direct access to or control over who received the invitation, or accurate numbers of all the student veterans on the campuses or those who received the invitation to participate in this study, an accurate description of the size and of the population is not possible.

Research instrument

As mentioned, a large volume of research confirming the utility of the CDSE using its abbreviated form has been conducted (Gati & Saka, 2001; Taylor & Betz, 1983; Restubog, Florentino, and Garcia, 2010; Gianakos, 1996; Sandler, 1998; Peterson and delMas, 1996). This includes minority groups such as students with disabilities (Luzzo, Hitchings, Retish, & Shoemaker, 1999). Based on experiential differences reported qualitatively between the groups chosen for comparison, it was expected that career self-efficacy would be affected. As mentioned, career self-efficacy appears to be as high or higher than other samples, including college students with and without disability. For those in this sample, exposure to combat, disability, or military rank, in general, do not appear to negatively impact career self-efficacy of participants nor do they differ significantly in CDSE from other studied populations. Qualitatively, however, participants described these variables as contributing to their career decisions and the difficulties or barriers they encountered, resulting from these experiences, in their career development process. Further exploration is needed into whether the CDSE is as responsive to the differences in veteran populations as it is to the other population groups already studied. A larger sample would also help clarify what differences, if any, exists between the groups studied.

Practice.

The current study points to several suggestions for military, clinical, and academic contexts to further support the career decision-making of student veterans.

Military

Student veterans in both phases of this study generally tended to be critical of the current design of transition services provided by the military. These individuals cited the lack of personalized services and large seminar or workshop modalities as being chiefly to blame for their dissatisfaction. Alternatively, smaller group formats and counseling may have a positive impact on the academic and career efficacy of this population. Those in the current sample also reported a proclivity toward and a level of comfort with online alternatives. Online education and career-related modules that can be tailored to address individual concerns, for instance, may be a welcomed addition to the required classes on transitioning from soldier to civilian, including career development, currently offered.

Other participants described the timing of the counseling they received as being problematic. Due to job requirements and other factors, some participants received the career services almost a full year before they exited military service. For some, the information provided at that time did not seem applicable and, as such, were not fully attended to, and specific questions related to their own situation had not yet been formulated or known that far in advance of their separation. For others, concerns over potentially needing to extend their contract until the many requirements of separation had been fulfilled contributed to the "check the box" mentality described by this sample. Investing in alternative platforms to deliver the material covered in the counseling (i.e. web-based), may help change the negative culture around the services provided. Such an approach may also increase the relevance of the material provided and may increase the

potential this program has on the success of military members. Future research into the development and effectiveness of online webinars, modules, and other templates for distance learning which specifically addresses career development, including career planning, may be particularly helpful and appreciated by this and future generations of veterans.

Clinical

The current research suggests constructing interventions to improve any of the five competencies, related to career decision-making measured by the CDSE, in which an individual may need support with (Betz, 1992). For instance, Betz and Hackett (2006) recommend counseling intervention is most warranted for people who score low on any of the CDSE subscales (e.g., 1-3). While participants in this study reported high CDSE scores on average, some individuals indicated low self-efficacy on one or more of the subscales. Low CDSE scores are predictive of avoidance behaviors that may be particularly responsive to such intervention. The CDSE may be a useful tool to screen individuals, including student veterans. Those who score low on any of the five Career Choice Competencies measured by the CDSE, may benefit from focused intervention to strengthen or enhance one's potential for making career decisions. Based on the results of this study, participants with disability, for instance, may benefit from interventions focused on increasing self-efficacy related to career planning, relative to non-disabled peers.

Academic

Findings from this study indicate faculty, academic advisors, and other departmental staff are trusted by student veterans to provide career counseling and career development assistance, especially for students in graduate programs. Evidence gathered in this study indicates that student veterans are willing to engage with their faculty to strengthen their career development. As such, faculty, academic advisors, and other departmental staff are uniquely positioned to assist student

veterans through their transition from service member to college student and beyond (Branker, 2009). Given the potential influence of self-appraisal, positive and negative, of this population, faculty and others providing career advice to students on campus would be wise to carefully evaluate both personal biases as well as their own understanding of and comfort in working with military veterans to avoid imposing unwarranted limitations on potential career goals and expectations (Lent et al., 1999; Rausch, 2014; Fabian, 2000). Such self-awareness and reflection are the responsibility of any ethical and multiculturally competent professional (Hall, 2008).

Encouraging exploration of a variety of interests, aptitudes, and potential accommodations/compensatory strategies that could mitigate perceived or real career-related barriers may reduce much of the anxiety around career decision-making and be particularly helpful (Foltz & Luzzo, 1998). Helping to facilitate work experiences or finding fellow veterans across a range of diverse jobs may also help to better align one's academic or career expectations and help demystify elements of academic and career pursuits. For students with disabilities, career-related options may be limited by the attributions made by the individual and others with respect to what they can and cannot do vocationally. Expectations of potential career outcomes, including attainment of career goals, may be addressed by evaluating the validity of these attributions and sources of information in counseling (Branker 2009; Clemens & Milsom, 2008; Lent et al, 1999).

Another important potential implication of this study for academic administrators has to do with timing. Timing, as it relates to when a service member can successfully exit the military, was important for participants due to its incongruence with a typical academic year. For example, one student described separating in the middle of the Fall quarter. As a prospective bioengineering major, a fixed sequence of courses begins each fall. As such, this student was not able to matriculate through his program on pace with the rest of his cohort which caused unnecessary

confusion and uncertainly throughout the completion of his degree. Although early and priority enrollment currently offered are helpful for many student veterans, such accommodations and best practices do not address the issue of taking courses out of order, especially when course sequencing are specifically designed to build content knowledge. In these instances, departments and administrators could identify online alternatives and could enroll the student out of sequence, contingent upon successful completion of appropriate coursework. Similarly, developing or adopting ways to streamline the process of enrollment while attending to the needs of all involved (e.g. the student, Veterans Administration, disability services, and specific veteran services on campus) would go far to transform academic environments into ones that are truly "veteran friendly". Implementation of new processes may involve more active training for the various stakeholders on the processes, systems and paperwork that often accompany student veterans.

Finally, there exists a significant cultural divide between those with and those without military service. Differences in life experiences and world views, relative to typically matriculating students, were expressed by participants of this study. Military veterans with and without disability may feel stigmatized when assumptions are made by faculty and students based on their military status or on their participation in an unpopular war, which may include the ongoing conflicts in Iraq and Afghanistan (Stone & Stone, 2015; Cohany 1992). Furthermore, perceptions of individuals, positive and negative, may not align with veteran's experience and could lead to feelings of isolation, increasing the transition difficulties for this population (Moxley, 2011; Burnett & Segoria, 2009. The military-civilian cultural divide and misunderstanding of military service, cited in the literature as a primary source of stigma experienced by veterans, may help explain why many student veterans make concerted efforts not to stand out on campus (Ruh, Spicer & Vaughan, 2009; Ostovary & Dapprich, 2011). To avoid needing to explain or answer

unwelcomed questions about their military experience, these students may choose not to wear military apparel, carry issued rucksacks, or decide to grow their hair longer than what is allowed in the military (Bryan, 2016). Respondents described concerns about being stigmatized by others because of their status as veterans and/or student with disability. This lack of cultural knowledge and understanding of military service and its impact of the psychosocial health of service members, beyond the stereotypes perpetuated by movies and television, has been shown to result in discrimination (Stone & Stone, 2015; Ostovary & Dapprich, 2011; von Schrader, Malzer, & Bruyère, 2014). For students with disabilities, negative attitudes from instructors may also be felt (Burgstahler & Doe, 2006). Although the current study did not specifically address issues related to stigma, nor is there evidence of such experiences negatively interfering with career self-efficacy, future research focusing attention on the role that discrimination may play as a potential barrier to career development for veterans with and without disabilities, may be helpful in developing effective coping interventions and frameworks for implementing policies to increase awareness and improve veteran experiences on campuses.

6.2 Limitations

Findings from this study need to be considered in light of a number of limitations. First, veteran status is protected under the Family Educational Rights and Privacy Act (FERPA). As such, access to personal email addresses and other protected information of enrolled student veterans was not available. Given this, there was no way to approach student veterans directly. Also, student veterans may also choose not to self-disclose their veteran status to their university. As a result, there was no way to know the total population across any of the institutions recruited to participate in this study.

The variables chosen to explore relative to the CDSE, namely disability status, combat exposure, and military rank, although well supported in the literature and the interviews in Phase I of the study as important factors to explore, they are only three of a variety of factors which could have been studied. Given the age range of participants in this study and opportunities to gain career-related learning experiences which impact career self-efficacy as we age, the influence of age or length of time since exiting the military, for instance, may be an important variable for this population. Likewise, differences in experiences with post-secondary education (i.e., transfer student versus not), influence of specific military occupations that align or are incongruent with civilian employment opportunities (i.e., infantry or combat-related versus administrative), may further help describe career self-efficacy student veterans (Gianakos, 2001; Gravely, 2012).

Due to the nature of cross-sectional research, data gathered represent perceptions of student veterans at a particular time. Their perceptions, then, are influences by the experiences and potential barriers currently felt, and subject to change over time. Detecting differences in CDSE of student veterans longitudinally, or at strategic academic and career milestones, would help address this potential limitation.

6.3 DIRECTIONS FOR FUTURE RESEARCH

This research provides an useful start to understanding the career decision-making self-efficacy of student veterans with and without disabilities. Further research to better understand the nuances of the factors that strengthen or impede career development processes is needed. Such information will add greater clarity and, potentially, lead to targeted interventions which will enable student veterans to maximize their potential on and off campus. For instance, for those whose career in the military was unexpectantly cut short due to downsizing or who were administratively separated due to service-connected disability, may require support that addresses

not only the sharp deviation in one's plan but in evaluating one's emotional readiness to choose a vocational path not previously envisioned. Additional qualitative data, for instance, using other forms of data collection including focus groups, may be effective to further identify important decision-making factors of this population. Facilitating discussions on the differences and similarities between career planning and issues around stigma and discrimination of both student veterans with and without disabilities, for instance, is warranted. Such conversations would also add depth to the interpretations made here as well as in future research efforts. Ultimately, the small sample size precludes making detailed recommendations. A larger scale survey is needed to clarify and inform future directions.

Additionally, while choosing to focus on students currently enrolled in school was purposeful in the current study, using similar methods to access the career self-efficacy and career choice processes of veterans in different stages of their career development may help identify additional differences or other areas for further research. For instance, do veterans' career self-efficacy change as they move through their degree programs? Are there significant differences in career self-efficacy for veterans who graduate, or transitioned successfully into a career? Both research inquiries may provide useful roadmaps designing developmentally appropriate interventions for enhancing the confidence with which this generation of veterans approaches career decision-making.

Synthesis

In sum, the findings from this study describe a sample of student veterans who exhibit high levels of career decision-making self-efficacy. According to Crites' (1978) model of career maturity, which Taylor and Betz (1983) used to operationalize the skills required in career decision-making, participants in this study appeared to be efficacious in and possess mature

attitudes necessary in making "good" career decisions. The maturity with which they approach career decision-making may relate to both their age relative to other college students, as well as the life experiences military service provides. These participants also seemed to prefer making these decisions independently, however, were willing to solicit practical advice from friends and family, as well as from other veterans. Participants also appear to have the skills and initiative to identify other professional career-related resources, including college faculty, when needed. With respect to the three variables (i.e. disability, combat exposure, and military rank) chosen to add additional context to understanding the CDSE of student military veterans, when comparing mean scores of those who endorsed having a disability against those who did not, only the Planning subscale was statistically significant. No other comparisons across these three groups were statistically significant. These individuals, in general, felt confident in and motivated by their ability to engage in behavior necessary to make career decisions after their military service.

For participants with disabilities, access to career resources, including time, and thinking systematically about one's career choice were discussed as being influential in their relatively high career self-efficacy. Challenges, including adapting to changes in physical and cognitive abilities resulting from their disability, as well as experiencing stigma as it may relate to both their disability and veteran status, may further compound the difficulty inherent to transitioning from soldier to civilian and from civilian to college student.

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Appendix A1: Consent Form (Phase I)

"Factors Salient to Career Decision-Making of Military Veterans Enrolled in College"

Investigators	Title	Department	Phone	Email
Josef Mogharreban, PhC (Contact person)	Principal Investigator	Rehabilitation Medicine, University of Washington	815-751-6055	josefmo@uw.edu
Kurt Johnson, PhD	Co-Investigator	Rehabilitation Medicine, University of Washington	206-543-3677	kjohnson@uw.edu

RESEARCHERS' STATEMENT

We are asking you to be in a focus group. The purpose of this consent form is to give you the information you will need to help you decide whether you want to be in the focus group of not. Please read the form carefully. You may ask questions at any time about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the focus group or not. This process is called 'informed consent'. You may keep this form for your records.

PURPOSE OF THE STUDY

The reason we are doing this study is to learn more about how veterans make decisions regarding their educational planning and career choice and what influence their military experience, including service-connected disability, has on their decisions. The focus group will help us develop programming, curriculum, and surveys that aim to improve educational and employment-related outcomes for veterans.

STUDY PROCEDURES

If you decide to be in this focus group, we will ask you to participate in one session with up to 12 other veterans. We will ask you to share stories and information about how you have engaged in career decision-making, how well or poorly you feel UW and the VA have prepared you to make these decisions, and what barriers you see and most important in navigating these processes. We want to hear about strategies that worked well and those that did not work well. In particular, we want to hear about things that make you more or less confident about your ability to enter the workforce after military service. We want to hear your recommendations that you would give to other people in similar circumstances. You do not need to answer any questions you do not want to answer.

The focus group discussion will last 1 ½ - 2 hours and, help in person, and led by a training moderator. Your participation will be complete after you have attended the focus group.

The focus group session will be audio-recorded and will be transcribed in real time so that we can have an accurate record of the conversation. We will analyze the experiences discussed. No identifiers, such as names, will be included in the written transcription. We will destroy the audio recordings after we have coded and analyzed the data.

RISKS, STRESS OR DISCOMFORT

While no potential risks are expected, it is possible that you might become upset if we ask a question that makes you think of difficult times you have had or otherwise makes you sad. While the questions do not ask for such information, it is possible that memories may be aroused in participant responses. You are free to stop participation in the focus group at any time. Your answers to questions will remain confidential and you are free to discuss as little or as much as you like in the session.

BENEFITS OF THE STUDY

There are no direct benefits to you for participating in this study, however, you may feel good about contributing to research that can help other veterans and those tasked with assisting vocationally understand and better address career decision-making of this population. Veteran and disability-related resource centers as well as Counseling departments at 4-year institutions stand to benefit greatly by having findings that may promote further quantitative and qualitative research about the topic.

OTHER INFORMATION

All data will be confidential. You will be assigned a confidential identifier that bears no resemblance to your name. This identifier will be used in all data analysis and reporting so that your name will not be associated with your data. The researchers will keep an electronic file that has the link between your name and contact information and your study identifier. We will destroy the file that contains the link between your identifier code and your name / contact information when all data analysis is complete, or no later than ____.

We are required to report to the authorities if, during your participation in this study, we learn of child abuse, elder abuse, or the intent to harm yourself or others.

Please email josefmo@uw.edu or call the principal investigator at 815-751-6055 with any questions or if you wish to be withdrawn from the study. If you have questions later on about the study you can ask one of the investigators listed above. If you have questions about your rights as a research subject, you can call the University of Washington Human Subjects Division at (206) 543-0098. We will give you a copy of this form for your records.

RESEARCHER'S SIGNATURE

Printed name of researcher Signature Date

SUBJECT'S STATEMENT

Participation in study:

This study has been explained to me. I volunteer to take part in this research. I have had a chance to ask questions. If I have questions later about the research, I can ask one of the researchers listed above. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (206) 543-0098. I will receive a copy of this consent form

Printed name of subject Date Signature of subject

Agreement to follow-up contact:

Sometimes, after we finish an interview, we may want to contact you if we have more questions. We might want to clarify something you said today. We might have more questions. Or, we might want to ask you to read our summary of our research to see if our summary matches what you told us. This statement asks if it is ok for us to contact you in the next few weeks or months (no more than nine months) if we have any follow-up questions. It is your choice if you would like to be contacted again or not. You are under no obligation for any further participation in this study. There is no additional payment for any further participation in this study. If you agree to be contacted and we do contact you, you are free to decline further participation at that time. If you are willing to answer additional questions, at that time we would talk about whether you would like to answer any additional questions by phone, by mail, by another in-person meeting, or by setting up a secure online discussion board between you and the researchers. Conducting detailed conversations via email is discouraged because we cannot guarantee the confidentiality of email.

____ **YES,** the researchers may contact me again if they have more questions. I understand I am under no obligation for any further participation in this study. I understand there is no additional payment for further participation in this study.

____ **NO,** I do not wish to be contacted in the future.

Printed name of subject Date Signature of subject

Appendix A2: Consent Form (Phase II)

"Factors Salient to Career Decision-Making of Military Veterans Enrolled in College"

Investigators	Title	Department	Phone	Email
Josef Mogharreban, PhC (Contact person)	Principal Investigator	Rehabilitation Medicine, University of Washington	815-751-6055	josefmo@uw.edu
Kurt Johnson, PhD	Co-Investigator	Rehabilitation Medicine, University of Washington	206-543-3677	kjohnson@uw.edu

RESEARCHERS' STATEMENT

You are being invited to participate in a research study about student veteran's academic and career decision-making. The purpose of this consent form is to give you the information you will need to help you decide whether you want to participate in this study or not. Please read the form carefully. You were selected as a possible participant because of your association with UW's Office of Student Veteran Life (OSVL). OSVL supports this study because learning more about veterans in college will assist them in better addressing the needs of student veterans' academic endeavors, including academic and career decision-making, a central tenet of their mission. This study is being conducted as part of a dissertation. You participate in this study by completing an online survey.

PURPOSE OF THE STUDY

The reason we are doing this study is to learn more about how veterans make decisions regarding their educational planning and career choice and what influence their military experience, including service-connected disability, has on their decision-making.

STUDY PROCEDURES

The survey will include a demographic questionnaire, questions related to responses provided by interviewees focusing on specific issues faced by student veterans including local resource utilization, and an established survey specifically addressing career decision self-efficacy.

RISKS AND BENEFITS

There are no known risks if you decide to participate in this research study as your participation is completely anonymous and no deception is used. The information collected will not benefit you directly, however, you may feel good about contributing to research that can help other veterans better address career decision-making. Veteran and disability-related resource centers as

well as Counseling departments at 4-year institutions stand to benefit greatly by having findings that may promote further quantitative and qualitative research about the topic.

OTHER INFORMATION

All data will be confidential. The researcher will not have access to your email address or any other identifiable information. Data from this study, excluding identifiable information, is accessible to the researcher and his dissertation chair only through a password protected database.

You can withdraw at any time by closing your browser window. Because your data will be anonymous, once submitted, any data cannot be withdrawn because it is unidentifiable. Your decision about whether or not to participate or to stop participation will not jeopardize your relations with OSVL or any the University of Washington in any way.

Please email josefmo@uw.edu or call the principal investigator at 815-751-6055 with any questions about this study. If you have questions about your rights as a research subject, you can call the University of Washington Human Subjects Division at (206) 543-0098. You may print a copy of this letter to keep.

Thank you for your service to our country and thank you for your time and contributions to this research.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.

Appendix B: Demographic Questionnaire

General Descriptive information

1. How old are you?
    a. 19-25
    b. 26-30
    c. 31-40
    d. 41-50
    e. 51 or older
2. What is your gender
    a. M
    b. F

Educational Attributes

3. Current Class Standing
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Graduate
4. Major, if known:

Military Experience

5. In which branch of the military did you serve?
    a. U.S. Air Force
    b. U.S. Army
    c. U.S. Coast Guard
    d. U.S. Marines
    e. U.S. Merchant Marines
    f. U.S. Navy
6. Do you have a service-connected disability?
    a. Yes
    b. No

Appendix C: Interview Guide

1) We want to know if your experience in the military and/or service-connected disability influenced, if at all, your academic and career decision-making here at UW.

    a. What kinds of questions should we ask to better understand these factors?
    <Probe> Can you tell me more about this?
    <Probe> What else should we ask?

    b. Did your experience in the military change or influence your career path?
    <Probe> What questions might we ask to learn more about that?
    <Probe> How closely does your MOS relate to your current career goals?

    c. What kind of career resources, within and outside UW, have you accessed?

        <Probe> Did you use the internet? The library? A career counselor? Transition Assistance Program?
        <Probe> What have you found most helpful?
        <Probe> Have your future career goals, if fully understood, influenced the type of services or supports you have sought?
        <Probe> How might we ask about its effectiveness

    d. How helpful was the preseparation counseling you received in terms of your academic and career planning?

        <Probe> What did you find most helpful?
        <Probe> How might we ask about that?

For the last question, I want to ask you for advice: You mentioned receiving assistance from ___, what do you think these professionals should know to maximize their effectiveness in working with veterans? What should other recently separated veterans thinking about a new career and returning to college know? How can universities enhance the career development of student veterans?

Appendix D: Survey Items

Please indicate the choice that best describes you.

1. What is your current military status (choose one)?
    a. Active duty
    b. Veteran
    c. Reservist
    d. National Guard
    e. Spouse or dependent of a veteran
    f. Other (please specify)

(Respondents who choose "'Spouse or dependent of a veteran" will skip to the end of the survey and receive the following notice: Thank you for accessing the survey. Dependents of veterans are not part of the study population. Thank you for your time.)

Researcher developed items

2. Which of the following best describes your current academic goal(s)?
    a. Bachelor's degree
    b. Master's degree
    c. Doctorate
    d. Other Professional degree (e.g. JD, MD, DPT)
    e. Undecided
3. What are your long-term career goals?
4. Upon separating, what was your Occupational Specialty (i.e. MOS, AFSC)?
5. In what ways, if at all, did your military experience influence (or change) your academic and/or career goals?
6. Do you have a service-connected disability?
    a. Yes
    b. No
7. If yes, what is your disability rating?
8. In what ways, if at all, did your service-connected disability influence (or change) your academic and/or career goals?
9. How many transferrable college credits, did you have upon entering UW?
10. When were these credits earned?
    a. Before joining
    b. While serving
    c. After separating and before transferring to UW
    d. N/A
11. On a scale of 1 to 5, how effective did you find the pre-separation counseling or transition assistance you received offered through the military?
    1 (Very effective) – 5 (Very ineffective)
12. In what ways could your experience with pre-separation counseling been improved?

13. Which of the following academic and career-related resources, if any, have your utilized? Check all that apply.
    a. Formal career counseling with professional counselor (military or civilian)
    b. Post/Base Education and/or Career Center
    c. Discussion(s) with faculty and/or advisors in departmental "home"
    d. UW's Office of Student Veteran Life (OSVL)
    e. Center for Teaching and Learning (CTL)
    f. Online resources for military veterans
    g. Took skills assessments and/or interest inventories
    h. Warrior Transition Unit
    i. University or military-sponsored job fair(s)
    j. Independent research
    k. Family and friends
    l. UW's Disability Resources for Students Office (DRS)
    m. None of the above
14. Which, if any, did you find most helpful in shaping or assisting with your academic and career decision-making? Why?
15. What advice would you give other student veterans with regards to their academic or career decision-making?

Career Decision Self-Efficacy-Short Form (CDSE-SF)

Questions 15-39 consists of the CDSE-SF. The questions are not displayed here due to copyright restrictions.

Demographics

16. How old are you?
17. What is your gender
    a. Female
    b. Male
    c. Transgender
    d. Other
    e. Prefer not to say
18. Current class standing:
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Graduate student
19. In the service you specified in Question 1, which option best describes your most recent military rank?
    a. Enlisted (E-1 – E-4)

b. Non-Commissioned Officer (E-5 – E-9)
c. Warrant Officer
d. Officer
e. Other (please specify)

20. During your military service, did you serve in combat?
    a. Yes
    b. No

Vita

Josef Mogharreban earned a doctoral degree in rehabilitation science from the University of Washington in 2018. Josef's research interests include the psychosocial impact of disability, employment-specific interventions, and policies related to generating awareness of and increasing access to participation in academic and social services for people with disabilities. Josef has worked professionally as a certified rehabilitation counselor for state departments of vocational rehabilitation assisting individuals with disabilities, including veterans, reach employment-related goals. Josef has also taught extensively in counseling theory, medical aspects of disability, research design, multicultural competency, as well as models of disability and disability history in multiple academic and community settings. He hopes to pursue his passion for research and teaching within a future academic position. Josef holds a master's degree in rehabilitation counseling and a bachelor's degree in psychology from Northern Illinois University.