

# The Relationship among Career Certainty, Career Engagement, Social Support and College Success for Veteran-Students

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By

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Social Support and College Success for Veteran-Students**

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## Abstract

Transition from high school to college has been highly researched and shown to be a necessary process toward college success. Research on understanding the transition process from a military career to college success has been much newer and sparser; making the understanding of factors predicting college success limited. One psychological construct, self-efficacy, has been shown to be a major factor in the success of college students and would likely parallel with the accomplishments, or lack thereof, of Veterans entering college after their time in the military. It will help the development of effective educational programs or interventions aiming at enhancing Veterans' college success if we understand the major factors that are associated with veteran students' college self-efficacy.

This study explored college self-efficacy along with life satisfaction as indicators of college success and examined their relationship with career certainty, career engagement, and perceived social support for Veteran-students. The results supported a positive relationship between college self-efficacy, career engagement, life satisfaction, and social support. Career certainty had no significant effect on college self-efficacy or life satisfaction, and Veteran-student service connection ratings had a small effect on career engagement. Career engagement and social support should be emphasized in Veteran-student experiences in to maximize their potential for college success.

*Keywords: Veteran-student, college self-efficacy, life satisfaction, career certainty, career engagement, social support*

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## Chapter 1: Introduction

Unemployment has been an uphill battle since the recession in the late 2000s. Post 9/11 Veterans have been among those who have been affected the most in finding sustained employment in the civilian workforce. The U.S. Department of Labor reported that 7.2% of post 9/11 Veterans were unemployed in March of 2015, compared to the national average of only 5.4%. Efforts such as Veteran Green Jobs, Feds Hire Vets, and Hire Heroes USA have been put into action to help decrease unemployment among veterans. The government even passed into law the Uniformed Services Employment and Reemployment Rights Act (USERRA) to assist Veterans, along with other legislation such as the VOW to Hire Heroes Act to give veterans preference for employment. Despite having served their country under harsh conditions, veterans still struggle to find jobs once their military career is completed.

Several factors contribute to veteran unemployment. Veteran advocate Mark Emmons (2013) notes the causes are varied and complex such as difficulty transferring military experience into the civilian workforce, poor coordination in efforts to assist veterans in finding jobs, and the stigma associated with combat-related mental health issues such as post-traumatic stress disorder (PTSD). Veterans who had Military Occupational Specialties (MOS) in Combat Arms (i.e., Infantry, Artillery) often have the most trouble finding employment, as these skills are not easily transferrable. Another major factor is that veterans often lack college degrees that many employers are requiring in this competitive job market.

Veterans transitioning to college from the military have many similar obstacles that first-generation college student's experience, as a great number of Veterans are first-

generation college students. Veterans also face additional and unique challenges compared to civilian students. In 2007, the Department of Defense Task Force reported that nearly 50% of service members are married and approximately one-fourth have children. Veterans are often the primary provider for their families. Pursuing college education may lead to reduced income and cause financial problems for the family. As observed by Herman, Raybeck, and Wilson (2008) even with financial support from the GI Bill some Veterans suffered from financial difficulty when entering college because it can take up to three months after classes have begun for the Veteran Administration to deliver GI Bill funds. Herman et al. (2008) also point out a common frustration among Veterans in that many colleges reject the academic credit for their military training and experience in correspondence with their college courses.

There has been significant attention given to how successful Veterans have been who do enter college despite the various challenges. More than 62,000 veterans using the Post-9/11 GI Bill have graduated from about 2,000 institutions in fact is "practically meaningless," because they reflect only a fraction of the 6,000 institutions nationally where Veterans have enrolled in the GI Bill since the program took effect in 2009 (Sander, 2012). The government and researchers often use graduation rate as one index of success. However, accurate data on Veterans' college completion rate are lacking, and the knowledge about how Veterans adjust to college is yet to be built.

From the perspective that college success is not a concrete concept associated with graduation, there are good psychological indicators to show students success at different stages of college experience, from transitioning into to transitioning out of college at completion. This study is interested in investigating college success as a

continuous phenomenon throughout college. The success can be reflected by students' felt college self-efficacy. College self-efficacy has been defined as the level of confidence in one's abilities to effectively complete tasks related to college success (Solberg et al., 1993). Brady-Amoon and Fuertes (2010) found a significant positive correlation between self-rated abilities (an individual's belief that he or she can accomplish a task or reach a current goal) and adjustment to college; however, when self-efficacy is factored in, the relationship between self-rated abilities and adjustment is essentially eliminated. This finding suggests that self-efficacy plays a pivotal positive role in adjustment to college.

College self-efficacy has been researched extensively over the past few years, often with minority populations, as these students tend to struggle the most with adjusting to college. Solberg and colleagues (1993) created the College Self-Efficacy Inventory (CSEI) to assess the confidence Latino students have in their abilities to succeed during their college experience. This measure has been used in various studies following its inception to gain further understanding of what factor influence a student's success in college. Wright et al. (2012) found that increased college self-efficacy related to persistence and academic success from one semester to the next for first-time college students. Considering it demonstrated a positive role and availability of its assessment, college self-efficacy will be used as an indicator of college success in this study.

Another indicator about how well college students are doing and how well they are prepared emotionally toward success is life satisfaction. Emmons and colleagues (1985) defined life satisfaction as a person's overall satisfaction with their life based on standards set for him or herself. Research has shown that higher rates of life satisfaction

are indicative of positive attributes in various aspects of a person's well-being.

O'Sullivan (2010) found that undergraduates who reported higher levels of hope, eustress (positive stress), and self-efficacy were much more likely to report higher levels of life satisfaction, demonstrating the significant relationship that these variables have with life satisfaction. Further, life satisfaction has been identified as a necessary component of optimal functioning in many aspects of life (Baumeister, Campbell, Krueger, & Vohs, 2003; Lyubomirsky, King, & Diener, 2005; Scheier, Carver, & Bridges, 1994).

Life satisfaction has also been studied in relation to college students' psychological well-being. Renshaw and Cohen (2013) found that life satisfaction acts as a distinguishing indicator of college students functioning across academic, social, and physical health domains. Their research also showed life satisfaction to be a strong predictor of the absence or presence of clinical symptoms and comorbidity. This is particularly relevant for understanding Veterans, as many of them struggle with mental health issues during and after their time in service that may extend to their college experience. Robertson and Brott (2014) stated that for military members transitioning to the civilian sector controlling their own career decisions could be a new and challenging concept. Robertson and Brott also found that control and confidence play a significant role in the life satisfaction of current or former military members' career transition. In this study, life satisfaction is used as a second indicator of college success.

Among various factors that may help Veterans achieve and maintain high college self-efficacy and life satisfaction, social support is at the top of the list. There has been evidence that Veterans often struggle with connecting with other students when they attend college because of their unique experiences in the military (Strickley, 2009).

Veterans often have conflicts with civilian peers and faculty members because of opposing geopolitical and wartime views (DiRamio, Ackerman, & Mitchell, 2008). Herman et al. (2008) stated that some professors make pejorative statements about the military during classes, causing veterans to feel uncomfortable and creating more distance between them and their civilian classmates. DiRamio et al. (2008) found that connecting with peers was difficult for veterans because of differing levels of maturity and presumably a sense of responsibility.

To help students transition into college, many colleges and universities have freshmen orientation, or a freshmen seminar courses to help them acclimate to college life. Herman et al. (2008) assert that orientation programs cater to the concerns of traditional students, but not to those of Veterans. The First-Year Experience (FYE) program can be impactful as it orients students to their new academic setting by providing students with opportunities to apply newly learned self-regulatory and study skills along with creating a safe environment in which academic success behaviors can be modeled and practiced (Gore Jr., 2005/06). Ackerman (2009) reports that with the awareness of the importance of support for Veterans, some campuses have a designated person or office to administer benefit programs for Veterans and provide support services beyond educational benefits. Such efforts aim at providing assistance to Veteran students and help them feel supported. This study assumes that perceived support would be a predictor of Veteran students' college success.

College is often seen as a stepping-stone toward a fulfilling career. Thus, a close connection between an individual's career aspiration and college success is expected. Career engagement and career certainty are at the heart of the college experience and

would be expected to have a significant role in veterans' transition to college. During their time in service, Veterans were assigned a Military Occupation Specialty and could follow a very structured guideline on how to advance in their military career. However, upon exiting the military, Veterans often face the challenge of choosing a career path that may be unrelated to their job specific military training. Most likely Veterans vary in their career certainty and level of difficulty in career engagement, which likely will have implications for their college success.

Upon exiting the military, many Veterans also have to manage mental and/or physical disabilities acquired during their military service. According to the Bureau of Labor Statistics, about a quarter of the 22 million military Veterans in the U.S. have a service-connected disability. These disabilities are assigned a disability rating by the U.S. Department of Veterans Affairs or the U.S. Department of Defense ranging in ratings from 0 to 100 percent, in increments of 10 percentage points bases on the severity of the condition. Compensation for a service-connected disability ranges from \$120 to \$2,670 per month for a single Veteran with no dependents. Veterans at a rating of 70% receive at minimum \$1,300.00 a month with eligibility for more financial benefits including healthcare benefits. These disabilities and substantial monetary entitlements could affect the Veterans need to engage in a post military career as they may not need the financial compensation or maybe unable to manage the emotional and/or physical tasks of starting a new career.

Minimal research is available to illustrate the transition from a military lifestyle to college for Veterans. The results of this study will add to the literature pertaining to Veterans who choose to attend college. There are many factors that contribute to the

success in college. Understanding the role of career engagement and certainty, in conjunction with social support in Veteran students' life satisfaction and college self-efficacy can inform the intervention efforts aiming at promoting Veterans' pursuit of and success in college. Thus, we will explore of the relationship between the predictor variables of career certainty, career engagement, and perceived social support and the criterion variable life satisfaction. We will also investigate how career certainty, career engagement, and perceived social support relate to college self-efficacy for Veterans who have transitioned from the military to college. Specifically, the study will investigate the following questions.

### **Research Questions**

#### **Question 1.**

Is career engagement, career certainty, and social support related to college self-efficacy and life satisfaction respectively?

#### **Question 2.**

Does perceived social support moderate the relationship between career certainty and career engagement on life satisfaction?

#### **Question 3.**

Does perceived social support moderate the relationship between career certainty and career engagement on college self-efficacy?

#### **Question 4.**

Will Veteran-students with a service connection of 70% or greater exhibit less career engagement and less certainty about their career?



## Chapter 2: Literature Review

### Veteran Mental Health

The nature of being a soldier lends Veterans to experiences uncommon to the average citizen and recent conflicts in Iraq and Afghanistan have produced significant amounts of Veterans returning home after being exposed to numerous types of traumatic events (Chard, Schumm, Owens, and Cottingham, 2010.) Among male and female soldiers aged 18 years or older returning from Iraq and Afghanistan, the development of PTSD range from 9% shortly after returning from deployment, to 31% a year after deployment (Thomas, Riviere, McGurk, Castro, and Hoge, 2010.) The environments in which Veterans work can lead to debilitating mental health disorders that not only affects their day-to-day functioning, but can also be life-threatening.

In a study comprehensive of Veteran suicide rates by the VHA Office for Suicide Prevention (2016), they found that Veterans Health Administration (VHA) users with mental health conditions or substance use disorders (SUD) has increased from 27% in 2001 to 41% in 2014. This report also found that on average as of 2010, 21 Veterans a day complete suicide, and as of 2014, Veterans were 22% more likely to die by suicide in comparison to adult civilians. Though increased occurrence of PTSD is likely to be only one factor in the escalation of suicide rates, it seems to be a significant correlate (Dao &Lehren, 2013). Veterans with PTSD and other mental health issues can experience substantial problems in addition to the symptoms directly associated with their diagnosis. These issues include, but are not limited to, higher incidences of suicide, underemployment, and homelessness (Schnurr et al., & Marx, 2009).

## **Veteran Disability**

There are approximately 22 million military Veterans equating to roughly 7% of the United States population according to the U.S. Census Bureau. The following statistics are provided by the Bureau of Labor Statistics as of August of 2017:

- 4.9 million Veterans, or 24% of the total, had a service-connected disability.  
Veterans with a service-connected disability are assigned a disability rating by the U.S. Department of Veterans Affairs or the U.S. Department of Defense.
  - Ratings range from 0 to 100 percent, in increments of 10 percentage points, depending on the severity of the condition.
- Compensation for a service-connected disability ranges from \$120 to \$2,670 per month for a single Veteran with no dependents. The primary factor in determining the amount of compensation is the Veteran's disability rating.
  - The amount of compensation can also increase to some extent for Veterans with a spouse or dependent minor children, or with a parent or parents who are financially dependent on the Veteran for some part of their living expenses
- The unemployment rate for Veterans with a service-connected disability was 4.3%, a marginal difference than the rate for Veterans with no disability (4.5%).
  - Labor force participation rate for Veterans with a service-connected disability (48.4 %), was not statistically different from the rate for Veterans with no disability (49.2%).

- Among Veterans with a service-connected disability, 28% reported a disability rating of less than 30%, while another 41% had a rating of 60 percent or higher.
- Veterans with a service-connected disability rating of less than 30 percent were much more likely to be in the labor force than those with a rating of 60 percent or higher (53.5% and 37.7%, respectively).
  - The unemployment rate for Veterans with a disability rating of less than 30% was 3.3%, not statistically different from those with a disability rating of 60% or higher (4.8 percent).
  - Only 25% of the Veterans with a SC rating of 70% or higher are employed.

Whether physical, mental, or both, many Veterans have a service-connected disability that impacts their lives on a daily basis, and must always be taken into consideration as it pertains to their functionality in any domain of life. Lack of access to college for students with disabilities is real, and so are difficulties adjusting to the academic and social demands of the university life for those students who do attend college (Murray et al. 2012). These difficulties are shown by higher course failure rates, lower retention rates, and significantly lower graduation rates in comparison to nondisabled peers (Murray et al 2000; Wessel et al 2009). Veteran-students with disabilities face even more obstacles. Some may lack aspirational career goals due to the struggles to complete a program, and some due to low financial motivation as they are compensated by a service connection of 70% or higher.

## **Veteran-Students**

For some first-time college students, this is when they will go out into the world and be on their own with all of the associated responsibilities (Read et al., 2012). While the Veteran-student population continues to grow across college and university campuses, there is a shortage of research on Veteran-students and the challenges they may encounter in an academic setting. In a 2013 study, Whiteman, Barry, Mroczek, & MacDermid Wadsworth examined the differences in academic functioning, alcohol use, mental health, and perceived emotional support of friends in college, of Veteran-students compared to traditional college students with no military experience. They found that Veteran-students reported experiencing less emotional support from peers than the civilian students. While emotional support did increase for both groups of students over time, the positive correlation between emotional support and mental health was found to be greater for civilian students than Veteran-students. Nevertheless, peer emotional support was still significantly related to mental health for Veterans-students. The complexity of the Veteran-student experience highlights the difficulties faced by Veteran-students in soliciting and receiving emotional support on college campuses, as well as importance of those who work with Veterans to understand their struggles.

Many Veteran-students are also first generation college students who are unfamiliar with process for applying to schools, the rigors of college courses, and who to seek out for assistance (Wurster, Rinaldi, Woods, & Ming Liu, 2012). Just the application process in itself can be anxiety provoking even before the Veteran steps into a classroom. While many institutions of higher education have Veteran-student offices and representatives to assist Veterans, often times the information geared towards ensuring

the Veteran receives the proper financial aid and not much beyond other services available to them. With the steadily increasing enrollment of Veteran-students in higher education, institutions will need to provide services and opportunities focused on the needs specific to Veterans.

Research has found that Veteran-students who have served in recent conflicts in Iraq and Afghanistan often feel isolated from peers at their educational institution even when actively seeking interactions with other Veterans on campus (Rumann & Hamrick, 2010; Shackelford, 2009; Smith & Zhang, 2009). The desire for Veterans to want to be among fellow military Veterans may be related to a need of Veteran-students to be around others who they believe have shared experiences in an environment where they may feel misunderstood by civilians. It is also very common for Veteran-students to be a few years older than their peers in class due to their time of service prior entering college which can also generate a different level of maturity or conflicting interests between Veterans and non-veteran students (Rumann, Rivera, & Hernandez, 2011). Since Veteran-students have unique life experiences and often more responsibilities than their younger academic peers, it is to be expected that some Veteran-students will feel isolated at their educational institution.

### **College Self-Efficacy**

Bandura (1977) postulated that a person's perceived self-efficacy, an individual's confidence in their ability to complete a task, are derived from performance accomplishments, vicarious experience, verbal persuasion, and physiological states. Through positive experiences from past successes with a similar task, individuals who have stronger perceived self-efficacy will be more active in their efforts to complete a

task. However, the opposite can occur if an individual has low self-efficacy. Bandura and Barbaranelli (1996) stated unless people believe that they can produce the desired effects by their actions, they have little incentive to act.

Self-efficacy research has continued to evolve and become more specified in variables that can influence self-efficacy. Hackett and Betz (1981) suggested individuals' self-efficacy expectations help determine their range of perceived career and academic options and their persistence and success in chosen options. Since then a major focus of research has been on self-efficacy and its influence on academic success. Lent, Brown, and Larkin (1986) found that for college students in technical and scientific majors there was a positive correlation between self-efficacy and academic achievement. Multon, Brown, and Lent (1991) then revealed facilitative relationships between self-efficacy beliefs with academic performance and persistence.

Lent, Brown, and Hackett (1994) expanded on Bandura's (1977) social-cognitive theory and Hackett and Betz's (1981) career theory to develop social-cognitive career theory. According to social-cognitive theory, when people believe they have the ability to complete a task and their actions will generate the desired outcomes, they are more motivated to take action, and to act in ways that are more probable to generate the desired outcome, than when they do not believe that their efforts will be successful. Within this theoretical framework, self-efficacy, an individual's belief that they are able to accomplish a given task or reach a projected goal, is considered a primary determining factor in a person's interests, choices, actions, behavior, and performance (Bandura, 1977; Lent et al., 1994).

Brown, Lent, and Gore (2000) utilized a confirmatory factor analysis to examine whether self-efficacy and self-rated abilities characterized one or two latent constructs. Their findings supported a two-factor model with a .53 mean inter-correlation between self-efficacy and self-rated ability items, suggesting that self-efficacy and self-rated abilities represent two empirically separate but complementary constructs in relation to career interests and perceived options. This study will examine certain factors that influence Veteran-students adjustment from the military to an academic environment.

Adjustment, defined as a congruent interactive relationship between people and their environment, is important in understanding college and career persistence and success. According to both Holland's (1997) vocational development theory and Tinto's (1993) along with other college student development theories, people fit or have positive interactions within environments composed of people who have similar interests and abilities. Additionally, theory would suggest neutral environments are biased in favor of the dominant group (Betz, 1989), and research illustrates adjustment to college and career settings is more difficult for people from groups who are underrepresented in higher education (Sedlacek, 2004). Research on the Veteran population would contribute to the counseling literature. Adjustment is also important to consider in light of the theoretical and empirical association between adjustment and college students' academic performance.

As described earlier, research has illuminated the relationship between self-efficacy for specific academic subjects, college success, and academic persistence (Lent et al., 1986; Multon et al. 1991). To gain further understanding of the role self-efficacy plays in a students' academic performance and persistence, Solberg, O'Brien, Villarreal,

Kennel, & Davis (1993), Solberg & Villarreal (1997) and Solberg et al., (1998) developed The College Self-Efficacy Inventory (CSEI) to measure college self-efficacy beliefs in students. The CSEI is a 20-item measure of a student's confidence in their ability to successfully participate in a variety of college-related activities. The CSEI is negatively correlated with measures of stress (e.g., physical, financial, academic, and psychological stress) and positively with measures of parental and peer social support, and academic integration (Gore Jr., Leuwerke, Turley, 2005/06).

The original version of the CSEI identified social self-efficacy (e.g., make new friends in college), academic self-efficacy (e.g., keep up to date with your school work), and roommate self-efficacy (e.g., socialize with others you live with) as the primary factors (Solberg et al., 1993). However, Solberg et al. (1998) added a fourth factor, social-integration, which added one item (join an intramural team). Gore Jr. et al. (2005/06) conducted a psychometric study of the CSEI finding evidence to support that the instrument has predictive value by showing that college self-efficacy beliefs were significantly related to two-year university retention measures and academic performance measures. They also found that students who persisted at the university for at least two years had higher efficacy beliefs than students who were not attending the university. Gore Jr. et al., (2005/06) suggest that the CSEI could be used to identify students who are at high risk for departing college as a result of low confidence for academic and pro-academic social behaviors, but further research is needed to understand the college self-efficacy beliefs of students from special populations.

Brady-Amoon and Fuertes (2010) examined the relationship between self-efficacy and self-rated abilities in conjunction with adjustment and academic performance with a



diverse sample of 271 undergraduate college students. Measures used in this study included the CSEI, Self-Estimates subscale of the Self-Directed Search, Student Adaptation to College Questionnaire (SACQ), and GPA. The results showed a significant positive association between self-efficacy and self-rated abilities, as measured by the CSEI and SDS Self-Estimates subscale,  $r(269) = .57, p < .01$ . Their findings demonstrated the association between self-efficacy and adjustment did not vary with the inclusion of self-rated abilities is further evidence of the strong positive association between self-efficacy and adjustment.

Vuong, Brown-Welty, Tracz (2010) studied the effects of self-efficacy on academic success of 1,291 first-generation college sophomore students. They utilized the CSEI measure self-efficacy, to determine persistence (P), students were asked for two percentages representing the perceived likelihood that they would complete the current term (P current term), and return the next term (P following term). These two percentages were documented as values from 1 to 6, and those values were used as the persistence rates (P current term and P following term). Two measures of self-reported GPA, previous term GPA and overall GPA, were based on 4.0 scale with greater GPAs indicating better academic performance than lower GPAs. The results indicated for all students, academic self-efficacy was a significant predictor of all four dependent variables or measures of academic success.

Adjusting to the college lifestyle mentally, emotionally, and financially requires a level of confidence to accomplish various tasks in order to be successful in college settings (Bowman, 2010; Smith & Zhang, 2009). Veteran students most often begin or return to higher education institutions being many years removed from the academic

environment. Veteran's self-efficacy around their ability to achieve their desired outcomes from their academic goals is of the utmost importance. By understanding what influences Veteran student's college self-efficacy, we can improve Veteran success during their college experience.

### **Career Certainty**

Crites (1973) originated the definition of career indecision as an "inability of the individual to select or commit her/himself to a particular course of action which will eventually lead to preparation for entering a specific occupation." Crites (1976) recognized five major steps necessary to have an effective career decision-making process. To begin, an individual must accurately conduct a self-appraisal regarding their interests, needs, skills, and values. Next a person must obtain occupational information that is vital for an individual to determine the various aspects of occupations that are likely to match their unique personal characteristics. The third element entails goal selection, in which a person makes choices about which occupation(s) they find preferable based on fit. The last two components are making future plans and problem solving. Once a person identifies their career goals, they must determine a strategy on how they will achieve their goals and be prepared to face challenges that will occur in pursuit of their career. These five components contain "career maturity," which Crites (1976) presented as a predominant developmental characteristic that allows an individual to effectively utilize the career decision-making process. Crites contended by engaging in these five steps, and in doing so demonstrate career maturity, individuals will be able to make sound career decisions.

Gati (1986) recognized four primary issues that can significantly impact a person from achieving an ideal career decision: 1) lack of information about one's self or of career options, 2) lack of resources to obtain the necessary information, 3) cognitive limitations in the individual preventing information processing, and 4) lack of ability in the individual to integrate and process information about them self and their career options. The dominating factor of these issues is sources of information, both about the individual's interests and their career options. Being able to effectively gather information about one's self and one's occupation of interest, an individual can be confident that they have the information necessary to elicit certainty their career decision.

Harren (1979) contended career decision-making needed to be particular to certain life stages in order for career developmental concepts to be integrated. Thus, his decision-making process developed with traditional college students in mind. Harren detailed a successive four-stage process beginning with Awareness, during which an individual engages in the assessment of their own past, present, and future, including analysis of the individual's current course of action, decision-making confidence, and environmental pressures. Second is Planning, which entails gathering information about an individual's career decision and their self. Once it is determined the necessary information has been obtained, the individual begins to narrow down options to a specific choice to prepare for the third stage. This next step is the Commitment stage, where the individual incorporates their choice into their self-concept and begins to plan to implement their decision. The final stage, Implementation, ensues when the individual engages in activities towards their decision and assesses it, and can return to the beginning of the process if they are not satisfied with their choice.

Career indecision is of utmost concern of counselors and psychologists, especially with regard to younger adults because they are in the process of making critical life decisions (Betz, 1992). Like young adults, Veterans transitioning to higher education from the military share this crucial decision making process. Luzzo (1993) detailed that non-traditional students are more likely than traditional students to have career attitudes that are characteristic of successful adults. Student-veterans have often had success during their time in the military garnering a strong work ethic, but can struggle to translate specific skills they've gained through their military experience to begin their next occupational endeavor.

In theory, an age-career developmental relationship is anticipated. Age-related differences have been reported in the literature to suggest that previous career planning and work experience are advantages to older students as they begin to solidify their interests and engage in the process of career decision-making (Healy et al., 1985). Super (1984) named people who return to college for career purposes as "recyclers." Since recyclers are likely to engage in tasks similar to those of which they have had previous experience, they should exhibit higher levels of career development than younger, traditional students, who are likely to be confronting the same tasks for the first time (Healy et al., 1987). Crites (1973) provided further theoretical support for the relationship between age and attitudes towards career decision-making, by describing career attitudes as maturational phenomena.

Tracey (2010) found the greater the congruence of interest with the occupation and of efficacy with the occupation, then the greater the certainty of that choice. Veteran-students would benefit from having specified vocational interests to provide them

direction for goals they can set for themselves. Veterans are accustomed to having a projected career trajectory, as it is customary in the military to have predetermined occupational progression. Jurgens (2000) discovered counseling interventions were beneficial in assisting students with their decision-making and found advantages of group work with undecided student populations stating, “working in a group setting can add an effective ‘I’m not alone’ component to these sometimes distressed students.” By having an understanding of what has been useful in influencing the success of college students can help inform how to facilitate success for Veteran-students as well.

### **Career Engagement**

Early iterations of career decision-making models have centered on the trait-and-factor matching model, which was developed on the hypothesis that people can effectively use rational thought to make complicated decisions such as choosing a career path (Krieshok, 1998). Contemporary research has questioned the function of rational decision-making in career decisions, the foundation of trait-and-factor approach. Trait-and-factor methods may also propagate the impracticable belief that selecting a career path occurs only once in a person’s life and if the person works diligently in their field, they are good until retirement (Savickas, 2000). Multiple assessments have been created utilizing the trait-and-factor model, which matches an individual to an occupation, has been the most frequently used method in career counseling to date (James & Gilliland, 2003). The straightforwardness of the matching model, coupled with various of assessments developed from this theory, create an ideal setting for efficiently guiding individuals towards satisfying careers, but comes with its drawbacks. The present-day world of work hardly resembles the distinct roles and stable employment market in which

the trait-and factor matching model was initially developed. Given the current state of the world of work, a single matching strategy is not efficacious for career counselors and could potentially be detrimental by reducing their clients' development.

Based on the instability and absence of security in today's civilian career trajectory, it is imperative to express flexibility in regards to one's future. This insecurity, perceived as opportunity, can convert happenstance into new interests or potential employment experiences. Along with the benefits of increased exploration and enhancement activities provided for the occupational decision-maker, engagement also increases the likelihood that a person will come across unpredicted career opportunities, or planned happenstance (Mitchell, Levin, & Krumboltz, 1999). However, these encounters are not solely by chance, they are created because of the effort an individual puts in to have these experiences and acquire knowledge in fields that they value for careers as well as being open to when new opportunities when presented, therefore shaping their own distinct career path.

While a linear progression of selecting a career path would be to choose field of interest then pursue an occupation, this process as detailed above, is much more fluid. Krieshok, Black, & McKay (2009) defined occupational engagement "as taking part in behaviors that contribute to the career decision-maker's fund of information and experience of the larger world, not just the world as processed when a career decision is imminent." This implies that career engagement is an action that one can partake in prior to needing to make a decision, and is a continuous process. Veterans can you use the knowledge they've obtained during their military experience to help them inform their career decision-making, as well as continue to gain further information in order to inform

their career pursuits. Sortheix, Dietrich, Chow, and Salmela-Aro (2013) found that individuals with higher intrinsic career value motivation during university years were more engaged with work consequently. Military service is career driven by nature and is a value instilled into Veterans, which should carry-on thru their post military lives.

To maximize one's potential in higher education in pursuit of a career, it requires an individual to be adaptable beyond the academic environment. Krieshok et al. (2009) would suggest in order for an individual to properly utilize their own agency, it must encompass seeking exploratory and motivating activities such as: campus organizational affiliation, interaction with professors in one's major, volunteer and internship experience in areas of interest, and knowledge of trends and opportunities in one's field. By engaging in these activities this affords the student with sources of information and a history of experiences to which they can make informed decisions about their interests, their abilities and skills, and in general the world of work (Krieshok et al., 2009).

The Trilateral Model of Adaptive Career-Decision Making developed by Krieshok, et al. (2009) diverges away from the matching-model and transitioned to experiential learning as the centerpiece of effective decision making. Exploration, enrichment, and engagement are the foundation of the theory focused on stimulating vocational adaptability. Exploration involves active participation in career-related tasks, which provide information to our rational and intuitive decision making processes, when are transitioning and are planning to make a decision. Enrichment depicts our efforts to expand and increase our experience and knowledge of career related developments and our personal interests in the absence of any anticipated transition to be made. Together exploration and enrichment combine to express the concept of occupational engagement.

Krieshok et. al, (2009) postulate occupational engagement has multiple purposes for the career decision-maker, by allowing experiential learning both the unconscious and conscious processes rely on heavily to make effective decisions. Additionally, occupational engagement increases the likelihood that a person will come across unanticipated employment opportunities, or planned happenstance (Krumboltz, 2011).

Kim et. al (2014) expressed many college students encounter challenges trying to find out about careers they might find interesting because of lack of opportunities for initial encounters with new experiences. However, those students who actively assert effort towards learning more about their career of choice have consistently been shown to have more certainty in their career decision-making than those who do not. Career engagement not only informs career choice, but also has been shown to be a contributing factor to the success of students in the university setting. Krieshok et. al (2009) would also asserts occupational engagement correlates positively with college GPA, personal development, and vocational identity, to further illustrate the importance occupational engagement has on college student success.

### **Social Support**

Social support is a concept that has been extensively researched and has been shown to be a critical factor to be in managing major life transitions and psychological symptomology. Lin (1986) defined social support as “perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners.” The also literature theorizes that the benefits of support is most beneficial when the content equals the weight of the stressor and possibly a model of optimum matching of support and stressors could assist in creating more effective support-based



interventions (Cohen & Wills, 1985; Cutrona & Russell, 1990). Jacobson (1986) suggests the time it takes in which the support is delivered, immediately or delayed, could influence the effectiveness and value for the receiver. The source of the distress will also play a role in whether support will be solicited or given without request. For example, a non-stigmatized, acute, evident stressor (e.g., a vehicle accident or loss of a significant other) is more probable to elicit voluntary support than a stigmatized, habitual, or unseen stressor (e.g., contracting HIV or a mental illness; Eckenrode & Wethington, 1990).

Along with matching, timing, and the nature of the stressor, the characteristics of the relationship between the supported and supporter is a vital component in the support-seeking process. For example, an individual looking for aid from a professional will generally solicit that care directly. An individual necessitating help from an intimate relationship might solicit support more subtly or draw voluntary support because of the awareness of the significant other to identify stress prior to it being expressed (Clark, 1983). The larger social environment also factors in the process in which support is utilized. House, Landis, and Umberson (1988) proclaimed a person's accessibility to their social network, social-structure position (e.g., gender, age, life-cycle stage, ethnicity, status), and social-group memberships (e.g., residential communities, organizational involvement, political affiliation) impact the utilization of significant others (also known as "strong ties"), along with other more distant connections or "weak ties," which are comprised of associates and loosely affiliated contacts (Granovetter, 1973). An interconnected network may facilitate the flow of information and thus increase the speed or likelihood of a stressor becoming known to potential supporters (Hall & Wellman, 1985).

Once support is rendered, there are a variety of ways in which social support is measured primarily by perceived and received support. In this study perceived support is operationalized as support that is accessible when necessary. Being aware that a person has a support network readily available has positive effects on coping and well-being (Wills & Shinar, 2000). When considering received support, the functional assessment approach assumes that different types of support in quantity and quality (emotional, informational, tangible) are applied through various relationships and are utilized differently in a variety of problems or stressors (Cutrona, Cohen, & Ingram, 1990). For example, the literature suggests that emotional support from people we have a relationship with is often better received than emotional support from individuals we do not share a strong bond or are unfamiliar to the person (Dakof & Taylor, 1990). Cutrona & Suhr (1992) also assert the ability to control the source of distress may affect what type of support that is needed and its effectiveness.

For Veteran-students, they can often share similar social support losses as traditional college students when transitioning from the military to college. Due to the loss of familiar and secure structuring contexts (e.g., family, existing social networks, and the home environment for those who live at school) during the transition to college and the increase in responsibility for life competence during emerging adulthood, perceived social support and adaptive coping strategies are two particularly critical variables to consider in this process (Lee et. al, 2014). For student-veterans these factors can be especially critical as their social network can be significantly impacted when they depart the military. Veterans are accustomed to having a readily accessible support network

through their designated units during their time in service, which provide resources for financial, health, and occupational needs.

Social support from family, peers, and others has been recognized as a critical protective factor that can improve positive developmental outcomes among college students in the presence of identified risks (Sarason and Sarason 2009; Wilks and Spivey 2010). Other researchers have found that perceived social support has a main or moderating effect on adjustment, and is beneficial to all individuals regardless of stress or risk status (Elliot et al. 1992; Yalcin 2011). Social support, according to this perspective, could potentially contribute to college self-efficacy of Veteran-students irrespective of the specific obstacles they face. Although beneficial effects of social support for college students in general have been well established (Chao 2011; Smock et al. 2011), less is currently known about the role of social support on college self-efficacy of Veteran-students, particularly in relation to career certainty and career engagement.

The importance of social support from peers is particularly impactful for college students in regards to psychological well-being. Hefner and Eisenberg (2009) found that among a random sampling of over 1300 college students, those with lower quality social support, especially from friends, were six times more at risk of depressive symptoms, than to those with higher quality social support. For student-veterans the added element of potential combat-related mental health issues increases the value of social support. Pietrzak et al. (2010) reported that Veterans who had lower post-combat deployment social support had significantly lower resilience and psychosocial functioning. The study also found that post-combat deployment social support partially mediated the association

between PTSD, depressive symptoms, and psychosocial functioning. The role of social support is expected to continue to play a pivotal role in the success of students-veterans.

### **Life Satisfaction**

During the development of the Satisfaction with Life Scale, Diener et al. (1985) defined life satisfaction as cognitive and judgmental process that assesses an individual's quality of life based on their criterion. Since its inception the scale has been the standard instrument for assessing life satisfaction. A couple of comprehensive reviews of the scale's usefulness by Pavot and Diener (1993, 2008) indicate it is predictive of numerous life outcomes comprising of physical and mental health, reduced risk of suicide, marital satisfaction, stronger social relationships, lower rates of substance abuse, and longevity. Studies would also suggest that appraisal of life satisfaction are influenced by success or failure in important life domains. For college students, an important life domain that contributes to judgments of life satisfaction is academic performance (Pavot & Diener, 2008).

In large, life satisfaction has been operationalized a person's overall cognitive appraisal of their life. Diener et al. (2004) suggested that a person evaluates their life as satisfactory according to an appraisal of internally constructed criteria and perceived life conditions. Comparatively, Shin and Johnson (1978) claim life satisfaction entails individuals measuring their quality of life versus their own distinct criteria or standards. DeNeve (1999) asserted that life satisfaction is defined by a person's cognitive appraisal of their total sum of experiences. Diener et al. (1985) proposes certain life domains, such as health, work, and social support, are incorporated in the evaluation of life satisfaction, but may not be valued equally among every person. A person may also be content with

the various areas of their life, but unsatisfied overall because the impact of just one particular area of greater value. By only researching specific domains of life satisfaction one can risk ignoring certain features of a person's life that impacts general life satisfaction, making a person seem more or less satisfied than they may actually be. This is why it is vital to acquire an overall appraisal of an individual's life satisfaction versus a combination of separate specified areas of life satisfaction.

Brown (1988) found that some life domains are stronger predictors of perceived stress than socio-demographic factors, emphasizing the importance and influence that subjective evaluations of quality of life have on overall well-being. Hamarat and colleagues (2001) research concluded young adults experienced significantly greater levels of perceived stress than older adults, and that perceived stress is a better predictor of life satisfaction. It is not surprising that elevated levels of stress would correlate with low levels of life satisfaction, how research has found dissatisfaction with life to be an indicator of stress experienced by many in higher education. In a study done by Cohen, Cohen, Kamarck, and Mermelstein (1983), perceived stress was correlated with lower life satisfaction coupled with increased depression and physical symptomology in college students. In an examination of the relationship between perceived stress and life satisfaction in medical students, Kent, Gorenflo, Daniel, and Forney (1993) found that increased perceived stress was negatively associated with life satisfaction, exhibiting the same pattern in undergraduates as it did for graduate students.

Renshaw and Cohen (2013) found that in a study of 1300 undergraduate college students using self-reported somatization, depression, and anxiety symptoms as indicators of psychological distress and self-reported life satisfaction as an indicator of

psychological well-being, psychological distress and well-being were significantly related to key indicators of life functioning. Students identified in the mentally-healthy group versus those in the mentally-unhealthy group had both the best overall academic achievement (indicated by the highest mean GPA) and the best overall reports of physical health. Life satisfaction has been a consistent factor in determining success in most pursuits, especially when considering adjusting to college. When considering life satisfaction in a sample of Veteran-students, it is important to take into account the many life experiences and responsibilities that traditional college students do not. This research looks to better understand how Veteran-students are transitioning to college and the potential accompanying benefits.

### **Research Questions and Hypotheses**

#### **Question 1.**

Are career engagement, career uncertainty, and social support related to college self-efficacy and life satisfaction respectively?

#### **Hypothesis 1.**

1a. Career engagement and social support will be positively related to college self-efficacy and life satisfaction respectively.

1b. Career uncertainty will be negatively related to college self-efficacy and life satisfaction.

#### **Question 2.**

Does social support moderate the relationship between career uncertainty and career engagement on life satisfaction?

**Hypothesis 2.**

Social support will moderate the relationship of career uncertainty and career engagement on life satisfaction.

**Question 3.**

Does social support moderate the relationship between career uncertainty and career engagement on college self-efficacy?

**Hypothesis 3.**

Social support will moderate the relationship of career uncertainty and career engagement on college self-efficacy.

**Question 4.**

Do Veteran-students with a service connection of 70% or greater exhibit less career engagement and less certainty about their career?

**Hypothesis 4.**

Veterans-students with a service connection of 70% or greater will exhibit significantly less career engagement and less certainty about their career.

## **Chapter 3: Methods**

### **Study Design**

The current study employs a correlational design using purposive sampling to collect original data acquired through the survey method. The purpose for this design is to explore the nature of college self-efficacy and life satisfaction in regards to their relationship between career engagement, career uncertainty, and social support with Veteran-students.

### **Participants**

Participants included 228 Veteran-students, age 18 or older, served in a branch of a U.S. Military Force, and were currently enrolled in institutions of higher education across the United States as a part-time or full-time student.

### **Measures**

#### **Demographics.**

The demographic information obtained included: Age; Ethnicity; Biological Sex; Gender Identity; Sexual Orientation; Branch of Military Service; Time of Service; Marital Status; Number of Children; Education Level; Type of Institution of current attendance; Major; and Employment Status. See Appendix \_ for the full questionnaire.

#### **College Self-Efficacy Inventory.**

The College Self-Efficacy Inventory (CSEI; Solberg, O'Brien, Villareal, Kennel, & Davis, 1993) was created to measure a student's confidence in their ability to successfully participate in a variety of college-related activities. The CSEI assesses four main components of college self-efficacy, namely, Academic, Roommate, Social self-efficacy, and Social Integration self-efficacy. The scale consists of 20 items rated on a



ten-point Likert scale with item responses ranging from 1-Not at all Confident to 10-Extremely Confident. Sample items include: *Participate in class discussions; Do well on your exams; Make new friends at college.* The total score range will be from 20-200 with higher scores indicating higher degrees of self-efficacy. The subscales have consistently been shown to be reliable with Cronbach's  $\alpha$  for each scale averaging .80 or higher in multiple studies (Solberg et. al, 1993; Solberg et. al, 1998; Barry & Finney 2000). In the present study, Cronbach's  $\alpha$ 's were .96 for this sample. In a psychometric investigation of the CSEI, Barry & Finney (2009) found that it demonstrated good convergent and discriminant validity by showing significant negative correlations at the level of  $p < .01$  between the CSEI and the Student Worry Questionnaire, Academic Concern subscale (SWQ) and the Interaction Anxiousness Scale (IAS), as well as significant positive correlations at the level of  $p < .01$  with GPA and Academic Confidence Rating (AcCon). See Appendix C for the full measure.

### **Career Engagement.**

The Occupational Engagement Scale-Student (OES-S; Cox, Krieschok, Bjornsen, & Zumbo, 2014) was developed to measure occupational engagement in college students. The OES-S is self-reported and has 9 items that are rated on a five-point Likert scale from 1-Not at all like me to 5-Very much like me. Sample items include: *I talk about my career choices with family or friends; I attend presentations or talks related to a career I might find interesting; I visit places I'm interested in working so I can learn more about them.* Total scores range from 9 – 45 with higher scores indicating more occupational engagement. The OES-S demonstrated a high Cronbach's  $\alpha$  coefficient for internal consistency reliability of .80 and an ordinal of .84 (Cox, Krieschok, Bjornsen, & Zumbo,

2014). In the present study, Cronbach's  $\alpha$  was .87 for this sample. See Appendix D for the full measure.

### **Career Uncertainty.**

The Career Decision Scale (CDS; Osipow, Carney, & Barak, 1976) was developed to discriminate between career-decided and career-undecided college students. The CDS is comprised of two subscales measuring career certainty and career indecision. It consists of 19 total items. Items 1 – 18 are rated on a four-point Likert scale from 4-Exactly like me to 1-Not at all like me. The 19<sup>th</sup> and final item is an open-ended question allowing the participant to comment on the status of their career decision. This item was not used in the current study. Lower scores indicate lower levels of career indecision. The first two items on the CDS assess the level of career certainty, while the next sixteen items measure the level of indecision. Sample items include: *I have decided on a career and feel comfortable with it. I also know how to go about implementing my choice; I know I will have to go to work eventually, but none of the careers I know about appeal to me; I know what I'd like to major in, but I don't know what careers it can lead to that would satisfy me.* The CDS demonstrated a high Cronbach's  $\alpha$  coefficient for internal consistency ranging from .82 to .90 (Osipow, 1987). In the present study, Cronbach's  $\alpha$  was .93 for this sample. Numerous studies have shown consistent reliability and construct validity of the CDS with persons of various cultural backgrounds (Shimizu et al., 1988; Martin et al., 1991; Nasab et al., 2015). See Appendix E for the full measure.

### **Life Satisfaction.**

The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) was developed to measure the judgmental component of subjective well-being

from a person's global perspective of their life satisfaction. The SWLS is self-reported with five items that are rated on a seven-point Likert scale from 1-strongly disagree to 7-strongly agree. Sample items include: *In most ways my life is close to my ideal; I am satisfied with my life*. The total score ranges from 5 to 35 with various benchmarks signifying the level of life satisfaction. Scores in the 5 – 9 range indicate extreme dissatisfaction, while scores in the 31 – 35 range indicate extreme satisfaction. Cronbach's  $\alpha$  showed evidence for high internal consistency at 0.87. In the present study, Cronbach's  $\alpha$  was .86 for this sample. The SWLS demonstrated adequate correlation with the Life Satisfaction Index showing a good level of internal consistency (Diener et. al., 1985). Evidence for good convergent, and predictive validity was supported by Pavot, Diener, Colvin, and Sandvik (1991). See Appendix G for the full measure.

### **Social Support.**

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) is designed to measure one's personal perception of support from their Family, Friends, and Significant Other. The scale is self-reported with 12 total items, 4 for each subscale. The responses are rated on a seven point Likert scale ranging from 1-Very Strongly Disagree to 7-Very Strongly Agree. Sample items include: *There is a special person who is around when I am in need; My friends really try to help me; My family is willing to help me make decisions*. The responses to items for each of the subscales are summed to obtain a total subscale score. The 12 item scores are totaled to acquire a global perceived social support score. The higher the reported total score indicates higher levels of perceived social support. Osman, Lamis, Freedenthal, Gutierrez & McNaughton-Cassill (2014) observed adequate estimates of internal

consistency reliability for scores on the MSPSS and found strong support for the use of the MSPSS as a uni-dimensional instrument. In the present study, Cronbach's  $\alpha$ 's was .93 for this sample. See Appendix F for the full measure.

### **Procedure**

All measures were delivered through Qualtrics, a secure online survey program, and time of completion for the survey averaged 14 minutes per participant. Participants were solicited via email through coordination with university and college Veteran Student Representative Offices. Veteran-students were sent an email from a Veteran Student Rep at their institution entailing a brief statement about the proposed study, age requirement, low potential for risk, and IRB information was given. Participation was requested, and a link to the survey was provided at the end of the email.

Additional participants were solicited from Veteran groups on social media, Facebook and LinkedIn, which were provided a link to survey as well. The survey itself began with the information statement/informed consent and detailed inclusionary and exclusionary criteria. Exclusion from participation contained Veterans who were not currently enrolled in an institution of higher education, or students who are not Veterans. Once the measurement battery was been completed, participants were shown a debriefing statement detailing the procedures and purpose of the study again. The debriefing reiterated confidentiality of participant information provided in the study. The participants were shown contact information for the primary investigator and faculty advisor again should they have any questions or concerns regarding their participation.

## Chapter 4: Results

### Analysis

#### Data Preparation

The entirety of collected responses was evaluated for completion ( $n = 269$ ). Incidents with a completion rate of less than 2% (i.e. no recorded responses after agreement of consent) were omitted from the sample ( $n = 36$ ). Demographic questions were then examined for extreme outliers (i.e. 21 year old with 10+ years of service) none of whom were found. Incidents that had missing values for any complete measure (i.e. CSEI, OES-S, CDS, MSPSS, SWLS) were also omitted ( $n = 5$ ). Incidents were next identified for having missing data on any measure ( $n = 11$ ). Missing values were replaced using item mean scores when creating overall scale scores. This method of replacing values requires all items on the individual scale to be equivalent, missing values occur at random, and the mean is based on a high percentage of items with non-missing values (Green & Salkind, 2014). Hence, incidents with missing values were only estimated if more than 80% of the individual measure's items were completed. For the shortest measure this allowed for only one omitted item, the largest measure allowed for four omitted items.

Power analysis for sample size was explored a-priori using G\*Power analysis that indicated a 119 person participant sample pool would be a sufficient sample size to identify a medium effect size of  $f^2 = 0.15$ , an alpha of  $= 0.05$ , and a power level 0.95 for 3 predictor variables. Final sample size was an  $N=228$ .

## Sample Demographics

Participants had a mean age (*SD*) of 29.90 (7.89) and were made up of 70.6% (*n* = 161) males, 28.9% (*n*=66) females, and 1 intersex. Ethnicity was reported as 51.3% (*n* = 117) White/Caucasian/Anglo, 23.7% (*n* = 54) Asian/Asian American, 12.3% (*n* =28) Black/African American, 6.1% (*n* = 14) Native American/Alaskan, 4.8% (*n* = 11) Latino/Latina/Hispanic, and 1.8% (*n* = 4) Other. The vast majority of the sample, 88.2% (*n* = 201) identified as heterosexual, 7.5 (*n* = 17) Bisexual, 1.8% (*n* = 4) Lesbian, 1.3 (*n* = 3) Gay, and 1.3 (*n* = 3) preferred not to disclose. Half of the sample, 50.4% (*n* = 115), served in the Army, 24.1% (*n* = 55) Air Force, 9.6 (*n* = 22) Marine Corps, 8.3% (*n* = 19) Coast Guard, and 7.5 Navy. A little more than half the sample, 55.3% (*n* = 126) had 1 – 3 years Time in Service, 31.1% (*n* = 71) 4 – 6 years, 6.1% 7 – 9 years (*n* = 14), 4.8% (*n* = 11) 10 or more years, and 2.6% (*n* = 6) retired from the military. Participant academic standing varied, 30.3% (*n* = 69) were Graduate Students, 26.8% (*n* = 69) Seniors, 16.7% (*n* = 38) Sophomores, 16.2 (*n* = 37) Juniors, 6.1% (*n* = 14) Freshmen, and 3.9% (*n* = 9) Other. Employment and enrollment status varied as well among the sample; 42.5% (*n* = 97) worked full-time and were full-time students, 24.6% (*n* = 56) worked part-time and were full-time students, 12.3% (*n* = 28) worked full-time and were part-time students, 11% (*n* = 25) were not employed and were full-time students, 6.1% (*n* = 14) worked part-time and were part-time students, and 3.5% (*n* = 8) classified themselves as other. Service Connection was separated by participants with a rating of 60% or lower equaling 61% (*n* = 139) of the sample and 70% or higher equating to 39% (*n* = 89) of the sample. Descriptive statistics are represented in Table 1 for significant demographic and predictor

variables and complete demographic information for current sample is presented in Appendix J.

### **Descriptive Analysis**

Means and standard deviations were calculated and are presented in Table 1 for the major study variables CSEI, OES-S, CDS, MSPSS, and SWLS. A correlation analysis was conducted to calculate Pearson correlation coefficients among significant demographic and major study variables. As shown in Table 2, the respective correlation of career engagement ( $r = .77, p < .01$ ) and social support ( $r = .74, p < .01$ ) with college self-efficacy was positive and significant, consistent with part of hypothesis 1. However, career uncertainty failed to show correlation with college self-efficacy. Similarly, the correlation of career engagement ( $r = .55, p < .05$ ) and social support ( $r = .60, p < .01$ ) with life satisfaction was positive and significant. Career uncertainty failed to show correlation with life satisfaction. Notably, college self-efficacy ( $r = .55, p < .01$ ) has a positive correlation with life satisfaction.

The correlation analysis also showed that some of the demographic variables were correlated with some of the constructs under investigation including the following: Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, and Service Connection. Thus a statistic decision was made to control for them in the regression analyses testing each hypothesis. Again, refer to Table 2 for correlation information among significant demographic variables and major study variables.

**Research Question 1.**

To further examine the predictive role of career engagement, career uncertainty and social support in college self-efficacy, a hierarchical multiple regression was conducted using college self-efficacy as the dependent criterion. A demographic block (Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection) was entered into equation at Step One of the regression and career engagement (OES-S), career uncertainty (CDS), and social support (MSPSS) were entered at the second step. The result (Table 3) showed that together the three predictors, career engagement (OES-S), career uncertainty (CDS), and social support (MSPSS), accounted for 63% of the variance in college self-efficacy,  $F(12, 216) = 49.83, p < .001$ , after controlling for the demographic variables. Specifically, career engagement ( $\beta = .51, p < .001$ ) and social support ( $\beta = .39, p < .001$ ) were significant predictors of college self-efficacy, but career uncertainty ( $\beta = -.06, p = .17$ ) was not. This result supported part of Hypothesis 1a that career engagement and social support were significant predictors of college self-efficacy, and failed to support Hypothesis 1b.

A second two-step hierarchical multiple regression was conducted to investigate the predictive role of career engagement, career uncertainty, and social support in life satisfaction after demographic variables (Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection) were controlled for. Life satisfaction was used as criterion, demographic block was entered at Step 1, and career engagement (OES-S), career uncertainty (CDS), and social support (MSPSS) were entered at Step 2. Table 4 summarizes the result showing career engagement, career uncertainty, and social support variables explained an additional 34%



of the variance in life satisfaction,  $F(12, 216) = 15.92$ ,  $p < .001$ , after the demographic variables were controlled for. Specifically, career engagement ( $\beta = .26$ ,  $p < .001$ ) and social support ( $\beta = .41$ ,  $p < .001$ ) were significant predictors of life-satisfaction, but career uncertainty ( $\beta = .08$ ,  $p = .15$ ) was not. The result supported part of Hypothesis 1a, that career engagement and social support were significant predictors of life satisfaction, and failed to support Hypothesis 1b.

### **Research Question 2.**

The second research question addressed whether social support moderates the relationship between career uncertainty and career engagement with life satisfaction. To answer this question a four-step hierarchical multiple regression was conducted. Life satisfaction (SWLS) was used as criterion, and demographic variables (Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection) were entered into the regression at Step 1, career engagement (OES-S) and career uncertainty (CDS) Step 2, social support (MSPSS) Step 3, and the interaction terms (OES-S x MSPSS; CDS x MSPSS) at the final step. Table 5 summarizes the result. It was shown that none of the interaction terms was significant, although social support accounted for an additional 9% of the variance in life satisfaction when entered at Step 3, after career engagement and career uncertainty were already in the equation. The result failed to support Hypothesis 2.

### **Research Question 3.**

The third research question addressed whether social support moderates the relationship between career uncertainty and career engagement with college self-efficacy. To answer this question a four-step hierarchical multiple regression was conducted.

College self-efficacy (CSEI) was used as criterion, and demographic variables (Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection) were entered into the regression at Step 1, career engagement (OES-S) and career uncertainty (CDS) Step 2, social support (MSPSS) Step 3, and the interaction terms (OES-S x MSPSS; CDS x MSPSS) at the final step. Table 6 summarizes the result. It was shown that none of the interaction terms was significant, although social support accounted for an additional 8% of the variance in college self-efficacy when entered at Step 3, after career engagement and career uncertainty were already in the equation. The result failed to support Hypothesis 3.

#### **Research Question 4.**

The fourth research question addressed whether Veteran-students with a service connection percentage of 70% or greater exhibited and those with 60 % or less differ in career engagement and certainty about their career. Hypothesis four stated that Veteran-students with a service connection grade percentage 70% of greater would exhibit less career engagement and less certainty about their careers than those with lower service connection percentage. Independent samples *t* tests were conducted to compare career engagement and career uncertainty between those with 70% or greater ( $N = 89$ ) and those with lower service connection percentage.

Inconsistent with the hypothesis, career engagement, as measured by total score on the OES-S, was significantly higher for Veteran-students with a service connection percentage of 70% or greater ( $M = 34.73$ ,  $SD = 7.15$ ,  $N = 89$ ) than those with lower service connection percentage ( $M = 32.74$ ,  $SD = 5.86$ ,  $N = 139$ ),  $t(226) = -2.83$ ,  $p = .005$ ,  $d = -.38$  indicating a small effect size. Consistent with the hypothesis, career uncertainty,

as measured by total score on the CDS, was significantly higher for Veteran-students with a service connection percentage of 70% or greater ( $M = 45.31$ ,  $SD = 11.23$ ,  $N = 89$ ) than those with a lower service connection percentage ( $M = 40.74$ ,  $SD = 11.28$ ,  $N = 139$ ),  $t(226) = -2.99$ ,  $p = .003$ ,  $d = -.40$  indicating a small effect size. Additionally, the assumption of homogeneity of variances was tested and satisfied via Levene's  $F$  test,  $F(226) = .32$ ,  $p = .570$ .

## Chapter 5: Discussion

### Summary of Results

The current study had two overarching goals: to provide further understanding of the Veteran-student population, and to investigate the relationship between Veteran-student college self-efficacy and career aspirations. This chapter will discuss the results organized by research questions, including a discussion under each question about how the results fit into current and future Veteran-student research, as well as the possible implications for Veteran-student services. Finally, the limitations of this study and future directions for research are discussed.

#### Question 1.

It was predicted that career engagement and social support would be positively related to college self-efficacy and life satisfaction respectively, and career uncertainty would be negatively related to college self-efficacy and life satisfaction. These hypotheses were confirmed with the exception of prediction made for career uncertainty. The results indicated that career engagement and social support had strong positive correlations with college self-efficacy and proved to be significant predictors of college self-efficacy as well. Career uncertainty was not correlated with college self-efficacy as hypothesized.

Similarly, the results also showed that career engagement and social support were positively correlated with and were significant predictors of life satisfaction as hypothesized. However, career uncertainty was not a significant predictor of life satisfaction. Consistent with recent research (Hirschi and Jaensch, 2015; Metheny and McWhirter, 2013; Tracey, 2010; Metheny and McWhirter, 2013; Torres and Solberg,

2001; Yalçın, 2011) it is not surprising career engagement and social support play significant roles into self-efficacy and life satisfaction. The results that career uncertainty was not correlated with college self-efficacy may speak to the evolving world of work where people have general ideas about the fields in which they want to work (i.e. aviation), but not a specific occupation (i.e. aircraft sheet metal mechanic) in that field. Thus Veteran-students may be comfortable and confident in pursuing a degree in psychology for instance, but that does not necessarily reflect the career or specific type of work they desire to do or will do.

### **Question 2.**

The role of social support has been demonstrated to have a strong influence in many domains of life and satisfaction with life is no exception. Part of this study's goal was to gain a better understanding of the predictive role of social support in life satisfaction. It was predicted that social support would moderate the relationship between career uncertainty and engagement in life satisfaction. The results failed to support the hypothesis of an interaction effect between social support and career engagement and career uncertainty. However it did indicate that social support accounted 9% of the variance in life satisfaction above and beyond that by for career uncertainty, career engagement, and other relevant demographic variables.

These findings again speak to the role of social support and career engagement on life satisfaction. Career engagement in particular had more predictive value than career uncertainty in life satisfaction, which could possibly be due to the nature of engagement activities, which involve interacting with others. Because we are heavily reliant on our ability to connect and interact with others, it is to be expected that much of our life

satisfaction be related to the support we receive from others. Veteran-students are accustomed to environments where support and engaging with others is necessary to accomplish their goals, and achieving goals is an important aspect of life satisfaction.

### **Question 3.**

Similar to the second research question, the role of social support and how it interacts with career uncertainty and career engagement in relation to college self-efficacy was tested. Again, social support was predicted to moderate the relationship between career uncertainty and career engagement on college self-efficacy. The results failed to support the hypothesis. Social support accounted for 9% of the variance in life satisfaction above and beyond that by career uncertainty, career engagement, and other relevant demographic variables.

The findings were consistent with previous research demonstrating social support's role in predicting college self-efficacy along with career engagement. While career uncertainty was not a significant predictor of college self-efficacy in this study, the direction of the relationship is consistent with the supporting literature (Betz & Taylor, 2006; Foltz & Luzzo, 1998; Lent & Hackett, 1987). Career uncertainty measured in this study was primarily based on questions regarding uncertainty about one's career choice. The Veteran-student sample may have already decided on their career path given that the 73% of the sample identified as Juniors or above in academic status, and have likely had success in college regardless of their career uncertainty.

Career engagement's relationship to college self-efficacy and ultimately college success is highlighted in this study. Career engagement can be a part-time job, an internship, attending a seminar, or simply talking with someone in a field of interest.

These activities are all available and largely apart of the higher education experience. Veteran-students have had many opportunities to engage in these activities through their military and educational experiences, giving them an understanding of what it takes to be successful and the confidence to employ the skills necessary to pursue an education and a career.

#### **Question 4.**

The final question examined the difference between Veteran-students with a service connection percentage of 70% or greater and those with a lower service connection percentage in career engagement and career uncertainty. It was predicted that Veteran-students with 70% or higher ratings would express less career engagement and less certainty about their careers. The data in the sample had mixed results as the Veteran-students with the greater service connection ratings exhibited higher scores in career engagement than those with the lower ratings, failing to support the hypothesis. However, as hypothesized, those with the lower service connection rating had lower scores in career uncertainty than the higher service connection group indicating more confidence in their career choice.

Given that the effect sizes in the differences between the groups in regards to career uncertainty ( $d = .40$ ) and career engagement ( $d = .38$ ) were minimal, it calls into question how much of a factor service connection makes in career related decisions. However, the results may suggest that the financial benefits of having a higher service connection rating could allow for more freedom and affordability to participate in activities in which a Veteran-student could learn more about potential career opportunities. Along with the financial benefits of the higher service connection,

Veteran-students with the higher ratings maybe uncertain of which careers they can pursue given their physical and/or mental limitations, or if they want to pursue a career at all.

### **Limitations**

Many factors may have affected the overall results of this study. The sample population was limited to Veteran-students which makeup a very small portion of enrolled students in higher education institutions. The study was specific to Veteran-students but reaching qualified participants was a difficult task. While the 228 participants were sufficient for the statistical power of this study, the results may not be generalizable to all Veteran-students due to the self-selection involved in participant recruitment. Information on the size of the academic institutions and resources available to these students were not obtained and those variables could play a significant part in the Veteran-student experience. The majority of the sample identified as a junior or higher in their academic standing, which is relatively advanced in a student's education, during which the process of narrowing down a career of choice may have already taken place for many of them. More than half of the participants identified as working full-time, which seems to suggest that they might have already worked their career field of choice and they were at school just for more education and for advancement. Thus, they may not face the challenge of selecting a career path as students early in their education

There are many other unaccounted for variables not included in this research analysis given the resources available and the exploratory nature with the Veteran-student population. Some of these include academic history, deployments, mental health status, and motivational factors. Any of these factors could have reasonably contributed to the



variability college self-efficacy, career uncertainty, career engagement, life satisfaction, and social support scores. Data on participant variables that were obtained such as ethnicity, employment status, and time in service could be utilized if future studies to gain more insight to the influences on college self-efficacy with this population.

### **Conclusion and Implications for Future Practice**

It is critical that career counselors be aware of the role self-efficacy in a students' life from their college experience and into the world of work (Wright et al., 2012). The findings of the current study have added to the sparse body of literature surrounding Veteran-students. It is encouraging that the results have been consistent with previous literature illustrating the benefits of social support on college self-efficacy and life satisfaction. This finding can continue the efforts of supplying more Veteran-centered academic advising, career counseling, and resource centers to promote Veteran-student inclusion and success as they transition into college and onto a new career path.

While career uncertainty did not exhibit a significant role in college self-efficacy and life satisfaction, career engagement consistently showed its benefit in those domains. Vocational exploration may resemble an exploration of transferable skills to empower a person (Bolles, 2011). Veteran-students participating in career counseling in an academic setting facility could immensely benefit from an exploration in career aspirations if there is doubt in this area. Counselors and advisors can provide education on the importance of adaptability and career engagement in the current world of work, and collaborate with the Veteran on activities in which they can participate to gain knowledge and experience in careers of interests.

The classroom environment in which they learn can influence Veteran-students' experience. The instructor's engagement and inclusion of Veteran-students by relating class content to their experience can provide an opportunity to build rapport as well as increase their sense of belonging. The support and encouragement received from instructors along with that from their academic peers could lead to a stronger sense of social support. While social support has to be actively sought and utilized by the Veteran-students, an environment that encourages support for them will make it more probable and easier for the Veteran to embrace the support and the academic experience.

Murray et.al. (2012) observed a negative relationship between financial stress and course self-efficacy for students with disability when their perceived total support level was low, but not for those with high levels of total support. This finding suggested that high levels of total support could help buffer the negative effects of financial stress on course-efficacy for students. While this further illustrates the positive effects of social support, it also shows the impact that finances can have on Veteran-students. The Veteran-students with a service connection rating of 70% or higher in this study expressed more career engagement but less certainty than those with a service connection rating of 60% or lower. This maybe suggesting that Veteran-students with a service connection of 70% or higher are engaging in activities that are interesting to them, but may not necessitate a need to pursue a career as they are already financially stable or unable to pursue due to complications related to their service connected disability and pension.

The role disability plays in a Veteran-students college experience needs further investigation. Newman et al. (2011) reported that the most common reason for failure to

complete college degree programs in up to 8 years after high school for students with disability is financial challenge. . While service connection payments and the GI Bill can aid in paying for higher education that may not be enough to cover other costs such as rent, transportation, and other daily living expenses. More research is needed to better understand the effects of finances on Veteran-students in relation to their college success along with other demographic factors. This study had over 50% of the participants identified as seniors or graduate students indicating they've been successful navigating their college experience. It is helpful that future studies focus on Veteran-students who are at the beginning of their academic careers and have not yet established their career aspirations and college acumen.

Continued research attention to the relationships among the various domains of the primary variables in this study will be worthwhile. For example, investigating the role of career engagement on academic self-efficacy could shed light on the function of career engagement for a Veteran-student, which directly affects their academic success apart of their college experience. Another area of interest in understanding Veteran-students is the relationship between college self-efficacy and the size of the institution. While some larger institutions may be able to afford more resources, utilization of those resources may be overwhelming to the Veteran-student as their demographic makeup (i.e. age, marital status, work history) starkly differs from their academic peers affecting their sense of belonging as they have less in common with the majority of the students on campus. Conversely, a smaller institution maybe able to provide more one-on-one services, but may lack the opportunity for Veteran-students to find peers who have shared experiences or have faculty and staff who can advise them based on their specific needs.

In conclusion, this study provided some insight into the Veteran-students' college experience, directions for future research, and recommendations for applied services. Many Veteran-students may make a seamless transition from the military to college, and then onto the world of work, but many others will have significant barriers and challenges that they need support to overcome. This study added building blocks for understanding and assisting career development and college success of Veteran-students.

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## Appendix A

### Information Statement

The Department of Educational Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand veteran's confidence in adjusting to college after the military. This will entail your completion of a survey. Your participation is expected to take approximately 15 – 20 minutes to complete. The content of the survey should cause no more discomfort than you would experience in your everyday life.

Although participation may not benefit you directly, the information obtained from this study will help us gain a better understanding of veteran's self-confidence in adjusting to college. Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. Your identifiable information will not be shared unless (a) it is required by law or university policy, or (b) you give written permission. No personally identifying information will be gathered from you using the Qualtrics system. The information that we do gather will be kept on an encrypted flash drive that only the researchers will have access to. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response.

If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to take part in this study and that you are at least 18 years old. If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Research Protection Program (HRPP), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email [irb@ku.edu](mailto:irb@ku.edu).

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## Appendix B

### Demographics Questionnaire

	Question	Response Options
1	Age	(fill in)
2	Ethnicity	Black or African American, Asian/Asian American, Native American or Alaskan Native, Latino/Latina/Hispanic, White/Caucasian/Anglo, Hawaiian/Pacific Islander, Bi-racial/Multi-racial, Other
3	Biological Sex	Male, Female, Intersex
4	Gender Identity	Man, Woman, Trans Man, Trans Woman, Gender Identity Not Listed Here
5	Sexual Identity	Heterosexual, Gay, Lesbian, Bisexual, Prefer not to say
6	Relationship Status	Single, In a committed relationship, Married, Divorced, Other
7	Number of Children	(fill in)
8	Branch of Service	Air Force, Army, Coast Guard, Marine Corps, Navy
9	Time in Service	1-3yrs, 4-6yrs, 7-9yrs, 10 or more years
10	Current Institution	University, College, Technical School, Other
11	Year in School	Freshman, Sophomore, Junior, Senior, Graduate Student, Other
12	Major/Field of Study	(Fill in)
13	Employment Status	Employed Full-time and a Full-time student, Employed Part-time and a Full-time student, Employed Full-time and a Part-time student, Employed Part-time and a Part-time student, Full-time Student not working, Part-time Student not working, Other
14	Service Connection	0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100





17	Understand your textbooks										
18	Keep up to date with your schoolwork										
19	Write course papers										
20	Socialize with others you live with										

Scoring: Total Score. Higher scores indicate higher college self-efficacy.

### Appendix D

#### Occupational Engagement Scale-Student (OES-S)

Instructions: This questionnaire contains some statements that people commonly make about their occupational engagement. Some of the statements may apply to you; others may not. Please read through them and indicate how closely each item describes you in your engagement with the world of work by choosing the appropriate number on the answer sheet.

	Statement	1 Not at all like me	2	3 Somewhat like me	4	5 Very much like me
1	I talk about my career choices with family or friends	1	2	3	4	5
2	I have contact with people working in fields I find interesting	1	2	3	4	5
3	I gain hands on experience that I might use in the future	1	2	3	4	5
4	I volunteer in an area that I find interesting	1	2	3	4	5
5	I attend presentations or talks related to a career I might find interesting	1	2	3	4	5
6	I ask people in social settings about what they do for a living or what they are interested in doing	1	2	3	4	5
7	I visit places I'm interested in working so I can learn more about them	1	2	3	4	5
8	I pursue opportunities in life because I just know they will come in handy.	1	2	3	4	5
9	I do lots of things that are interesting to me	1	2	3	4	5

Scoring: Total Score. Higher scores indicate more occupational engagement.

## Appendix E

### Career Decision Scale (CDS)

Instructions: This questionnaire contains some statements that people commonly make about their educational and occupational plans. Some of the statements may apply to you; others may not. Please read through them and indicate how closely each item describes you in your thinking about a career or an educational choice by choosing the appropriate number on the answer sheet.

	Statement	4 Exactly like me	3 Very much like me	2 Only slightly like me	1 Not at all like me
1	I have decided on a career and feel comfortable with it. I also know how to go about implementing my choice.	4	3	2	1
2	I have decided on a major and feel comfortable with it. I also know how to go about implementing my choice.	4	3	2	1
3	If I had the skills or the opportunity, I know I would be a _____ but this choice is really not possible for me. I haven't given much consideration to any other alternatives, however.	4	3	2	1
4	Several careers have equal appeal to me. I'm having a difficult time deciding among them.	4	3	2	1
5	I know I will have to go to work eventually, but none of the careers I know about appeal to me.	4	3	2	1
6	I'd like to be a _____, but I'd be going against the wishes of someone who is important to me if I did so. Because of this, it's difficult for me to make a career decision right now.	4	3	2	1

	I hope I can find a way to please them and myself.				
7	Until now, I haven't given much thought to choosing a career. I feel lost when I think about it because I haven't had many experiences in making decisions on my own and I don't have enough information to make a career decision right now.	4	3	2	1
8	I feel discouraged because everything about choosing a career seems so "iffy" and uncertain; I feel discouraged, so much so that I'd like to put off making a decision for the time being.	4	3	2	1
9	I thought I knew what I wanted for a career, but recently I found out that it wouldn't be possible for me to pursue it. Now I've got to start looking for other possible careers.	4	3	2	1
10	I want to be absolutely certain that my career choice is the "right" one, but none of the careers I know about seem ideal for me.	4	3	2	1
11	Having to make a career decision bothers me. I'd like to make a decision quickly and get it over with. I wish I could take a test that would tell me what kind of career I should pursue.	4	3	2	1
12	I know what I'd like to major in, but I don't know what careers it can	4	3	2	1

	lead to that would satisfy me.				
13	I can't make a career choice right now because I don't know what my abilities are.	4	3	2	1
14	I don't know what my interests are. A few things "turn me on" but I'm not certain that they are related in any way to my career possibilities.	4	3	2	1
15	So many things interest me and I know I have the ability to do well regardless of what career I choose. It's hard for me to find just one thing that I would want as a career.	4	3	2	1
16	I have decided on a career, but I'm not certain how to go about implementing my choice. What do I need to do to become a _____ anyway?	4	3	2	1
17	I need more information about what different occupations are like before I can make a career decision.	4	3	2	1
18	I think I know what to major in, but feel I need some additional support for it as a choice for myself.	4	3	2	1

Scoring: Total Score. Higher scores indicate more career indecision.

### Appendix F

#### Multidimensional Scale of Perceived Social Support (MSPSS)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

	Statement	1 Very Strongly Disagree	2 Strongly Disagree	3 Mildly Disagree	4 Neutral	5 Mildly Agree	6 Strongly Agree	7 Very Strongly Agree
1	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3	My family really tries to help me.	1	2	3	4	5	6	7
4	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6	My friends really try to help me.	1	2	3	4	5	6	7
7	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8	I can talk about my problems with my family.	1	2	3	4	5	6	7
9	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11	My family is willing to help	1	2	3	4	5	6	7

	me make decisions.							
12	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Scoring: Total Score. Higher scores indicate higher social support.



## Appendix G

### Satisfaction with Life Scale (SWLS)

Instructions: Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by selecting the appropriate number.

	<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Slightly Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Slightly Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	In most ways my life is close to my ideal.	1	2	3	4	5	6	7
2	The conditions of my life are excellent.	1	2	3	4	5	6	7
3	I am satisfied with my life.	1	2	3	4	5	6	7
4	So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
5	If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

Scoring: Total score. Higher scores indicate higher levels of life satisfaction.

## Appendix H

### Tests of Distributions

Variable	Kolmogorov-Smirnov	Sig	Skewness	Kurtosis
Age	.171	.000*	2.413 <sup>c</sup>	7.938
Ethnicity	.315	.000*	-.195 <sup>a</sup>	-.974
Biological Sex	.444	.000*	1.017 <sup>c</sup>	-.620
Gender Identity	.430	.000*	2.185 <sup>c</sup>	9.861
Sexual Identity	.518	.000*	2.700 <sup>c</sup>	5.776
Relationship Status	.271	.000*	.851 <sup>b</sup>	.832
Number of Children	.298	.000*	1.563 <sup>c</sup>	3.381
Branch of Service	.335	.000*	1.061 <sup>c</sup>	.349
Time in Service	.311	.000*	1.680 <sup>c</sup>	2.553
Current Institution	.275	.000*	1.109 <sup>c</sup>	1.083
Year in School	.216	.000*	-.685 <sup>b</sup>	-.450
Employment Status	.251	.000*	-1.238 <sup>c</sup>	.758
Service Connection	.102	.000*	-.187 <sup>a</sup>	-.902
Service Connection Group	.397	.000*	.453 <sup>a</sup>	-1.811
College Self-Efficacy	.082	.001*	-.584 <sup>b</sup>	.257
Career Engagement	.055	.095	-.513 <sup>b</sup>	.928
Career Certainty	.148	.000*	-.605 <sup>b</sup>	-.392
Life Satisfaction	.134	.000*	-.630 <sup>b</sup>	-.054
Social Support	.077	.002*	-.727 <sup>b</sup>	-.675

\* $p < .05$

<sup>a</sup> -.5. To .5 = approximately symmetric

<sup>b</sup> -.1 to -.5 or .5 to 1 = moderately skewed

<sup>c</sup> <-1 or >1 = highly skewed

**Appendix I****Test of Internal Reliability**

Variable	Cronbach's Alpha
College Self-Efficacy Inventory	.959
Occupational Engagement Scale-Student	.865
Career Decision Scale	.925
Multidimensional Scale of Perceived Social Support	.937
Satisfaction with Life Scale	.857

## Appendix J

## Veteran-students Demographics

Variable	Category	<i>n</i>	%	<i>M</i>	<i>SD</i>	min	max
Age	-	228	-	29.90	7.89	18	70
Ethnicity							
	Black/African American	28	12.3	-	-	-	-
	Asian/Asian American	54	23.7	-	-	-	-
	Native American/Alaskan	14	6.1	-	-	-	-
	Latino/Latina/Hispanic	11	4.8	-	-	-	-
	White/Caucasian/Anglo	117	51.3	-	-	-	-
	Other	4	1.8	-	-	-	-
Bio-Sex							
	Male	161	70.6	-	-	-	-
	Female	66	28.9	-	-	-	-
	Intersex	1	0.4	-	-	-	-
Gender Identity							
	Man	161	70.6	-	-	-	-
	Woman	66	28.9	-	-	-	-
Sexual Identity							
	Heterosexual	201	88.2	-	-	-	-
	Gay	3	1.3	-	-	-	-
	Lesbian	4	1.8	-	-	-	-
	Bisexual	17	7.5	-	-	-	-
	Prefer not to say	3	1.3	-	-	-	-
Relationship Status							
	Single	100	43.9	-	-	-	-
	Married	97	42.5	-	-	-	-
	In committed relationship	29	12.7	-	-	-	-
	Divorced	1	.4	-	-	-	-
	Other	1	.4	-	-	-	-
Number of Children							
	Zero	118	51.8	-	-	-	-
	One	49	21.5	-	-	-	-
	Two	50	21.9	-	-	-	-
	Three	6		-	-	-	-
	Four	1		-	-	-	-
	Five	3		-	-	-	-
	Six	1		-	-	-	-

Branch of Service							
	Air Force	55	24.1	-	-	-	-
	Army	115	50.4	-	-	-	-
	Coast Guard	19	8.3	-	-	-	-
	Marine Corps	22	9.6	-	-	-	-
	Navy	17	7.5	-	-	-	-
Time in Service							
	1 – 3 years	126	55.3	-	-	-	-
	4 – 6 years	71	31.1	-	-	-	-
	7 – 9 years	14	6.1	-	-	-	-
	10 or more years	11	4.8	-	-	-	-
	Retired from Military	6	2.6	-	-	-	-
Current Institution							
	University	105	46.1	-	-	-	-
	College	97	42.5	-	-	-	-
	Technical School	17	7.5	-	-	-	-
	Other	9	3.9	-	-	-	-
Year in School							
	Freshman	14	6.1	-	-	-	-
	Sophomore	38	16.7	-	-	-	-
	Junior	37	16.2	-	-	-	-
	Senior	61	26.8	-	-	-	-
	Graduate Student	69	30.3	-	-	-	-
	Other	9	3.9	-	-	-	-
Employment Status							
	EFT/FTS	97	42.5	-	-	-	-
	EPT/FTS	56	24.6	-	-	-	-
	EFT/PTS	28	12.3	-	-	-	-
	EPT/PTS	14	6.1	-	-	-	-
	Not Employed/FTS	25	11.0	-	-	-	-
	Other	8	3.5	-	-	-	-
Service Connection							
	0%	21	9.2	-	-	-	-
	10%	11	4.8	-	-	-	-
	20%	14	6.1	-	-	-	-
	30%	14	6.1	-	-	-	-
	40%	18	7.9	-	-	-	-
	50%	40	17.5	-	-	-	-
	60%	21	9.2	-	-	-	-

70%	27	11.8	-	-	-	-
80%	19	8.3	-	-	-	-
90%	12	5.3	-	-	-	-
100%	31	13.6	-	-	-	-

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Note: EFT = Employed Full-Time; EPT = Employed Part-Time; FTS= Full-Time Student; PTS = Part-Time Student.

Table 1  
*Means and Standard Deviations of major variables*

	<i>M</i>	<i>SD</i>
CSEI	148.67	33.99
SWLS	25.00	6.33
OES	33.23	6.49
CDS	42.53	11.46
MSPSS	63.63	13.42

Note: n = 228; CSEI = College Self-Efficacy Inventory Score; OES-S = Occupational Engagement Scale-Student Score; CDS = Career Decision Scale Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; SWLS = Satisfaction With Life Scale Score.

Table 2  
*Correlations between demographics and major study variables*

	Age	Eth.	Sex ID	BOS	TIS	YIS	ES	SC	CSEI	OES-S	CDS	MSPSS
Age												
Eth.	.05											
Sex ID	-.10	-.19**										
BOS	.01	.10	-.01									
TIS	.42**	.07	-.13	-.03								
YIS	.05	-.14**	.18**	.00	.06							
ES	.02	.06	-.01	.03	.05	.19**						
SC	-.13	-.15*	.12	-.10	-.08	.21**	.10					
CSEI	.11	-.12	-.10	-.10	.05	.09	.05	.20**				
OES-S	.01	-.14*	-.01	-.02	-.08	.17**	.09	.19**	.77**			
CDS	-.21**	-.18**	.13*	.04	-.24	.18**	.02	.24**	-.12	-.04		
MSPSS	.20**	-.07	-.11	-.16*	.10	.04	.05	.12	.74**	.62**	-.11	
SWLS	.06	-.06	-.03	-.16*	-.03	.11	.16*	.23**	.55**	.55*	.04	.60**

Note: N = 228; Eth. = Ethnicity; Sex ID = Sexual Orientation; BOS = Branch of Service; TIS = Time in Service; YIS = Year in School; ES = Employment Status; SC = Service Connection; CSEI = College Self-Efficacy Inventory Score; OES-S = Occupational Engagement Scale-Student Score; CDS = Career Decision Scale Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; SWLS = Satisfaction With Life Scale Score. \*\* $p < .01$ , \* $p < .05$



Table 3  
*Summary statistics and results of two-step hierarchical regression on CSEI*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i>	$\Delta R^2$	$\Delta F$	<i>p</i> $\Delta F$
Step 1						.09	.09	2.62	.01*
DEMO	-	-	-	-	-				
Step 2						.71	.63	160.48	.00**
OES-S	2.70	.26	.51	10.517	.00**				
CDS	-.17	.12	-.06	-1.39	.17				
MSPSS	1.00	.12	.39	8.02	.00**				

Note: n=228; DEMO = Demographic variables controlled for this in regression included: Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection. CSEI = College Self-Efficacy Inventory Score; OES-S = Occupational Engagement Scale-Student Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; CDS = Career Decision Scale Score. \*\* $p < .001$ , \* $p < .05$ .

Table 4  
*Summary statistics and results of two-step hierarchical regression on SWLS*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i>	$\Delta R^2$	$\Delta F$	<i>p</i> $\Delta F$
Step 1						.11	.11	3.37	.00**
DEMO	-	-	-	-	-				
Step 2						.45	.34	44.06	.00**
OES-S	.26	.07	.26	3.86	.00**				
CDS	.05	.03	.08	1.45	.15				
MSPSS	.20	.03	.41	6.03	.00**				

Note: n=228; DEMO = Demographic variables controlled for this in regression included: Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection. SWLS = Satisfaction with Life Scale Score; OES-S = Occupational Engagement Scale-Student Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; CDS = Career Decision Scale Score. \*\* $p < .001$ , \* $p < .05$ .

Table 5  
*Summary statistics and results of four-step hierarchical regression on SWLS*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i>	$\Delta R^2$	$\Delta F$	<i>p</i> $\Delta F$
Step 1						.11	.11	3.37	.00**
DEMO	-	-	-	-	-				
Step 2						.36	.25	41.22	.00**
OES-S	.51	.06	.52	9.08	.00**				
CDS	.04	.03	.07	1.20	.23				
Step 3						.45	.09	36.32	.00**
MSPSS	.20	.03	.41	6.03	.00**				
Step 4						.46	.01	1.81	.17
OES x MSPSS	-.17	.25	-.04	-.68	.50				
CDS x MSPSS	.66	.36	.11	1.84	.07				

Note: n=228; DEMO = Demographic variables controlled for this in regression included: Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection. SWLS = Satisfaction with Life Scale Score; OES-S = Occupational Engagement Scale-Student Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; CDS = Career Decision Scale Score. OES x MSPSS = Interaction between OES and MSPSS. CDS x MSPSS = Interaction between CDS and MSPSS. \*\* $p < .001$ , \* $p < .05$ .

Table 6  
*Summary statistics and results of four-step hierarchical regression on CSEI*

	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	<i>R</i>	$\Delta R^2$	$\Delta F$	<i>p</i> $\Delta F$
Step 1						.09	.09	2.62	.01*
DEMO	-	-	-	-	-				
Step 2						.64	.55	161.37	.00**
OES-S	3.98	.23	.76	17.53	.00**				
CDS	-.19	.13	-.06	-1.41	.16				
Step 3						.72	.08	64.39	.00**
MSPSS	1.00	.12	.39	8.02	.00**				
Step 4						.73	.01	3.23	.04*
OES x MSPSS	-2.06	.95	-.08	-2.16	.05				
CDS x MSPSS	2.11	1.36	.07	1.55	.12				

Note: n=228; DEMO = Demographic variables controlled for this in regression included: Age, Ethnicity, Sexual Orientation, Branch of Service, Time in Service, Year in School, Employment Status, Service Connection. CSEI = College Self-Efficacy Inventory Score; OES-S = Occupational Engagement Scale-Student Score; MSPSS = Multidimensional Scale of Perceived Social Support Score; CDS = Career Decision Scale Score. OES x MSPSS = Interaction between OES and MSPSS. CDS x MSPSS = Interaction between CDS and MSPSS. \*\* $p < .001$ , \* $p < .05$ .