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Meaning in Life in College Student Veterans: Exploring Its Relationship to Career Thoughts and Depression

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MEANING IN LIFE IN COLLEGE STUDENT VETERANS: EXPLORING ITS RELATIONSHIP TO CAREER THOUGHTS AND DEPRESSION

By

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I dedicate this dissertation to two exceedingly important individuals, my husband and my grandfather. My husband, Sean Buzzetta, has offered an unconditional amount of love, support, and encouragement throughout this journey. I owe a large part of this accomplishment to him, as he has always believed in me and continuously provided unwavering support throughout my graduate studies. I am extremely grateful to have him as a continued source of inspiration and love. He will always be my best friend and life partner, and for that, I am eternally grateful. I also dedicate this dissertation to my grandfather, Anthony Springer, a man who changed my life for the better. My grandfather has and always will be my role model, mentor, and father. I grew up in a household where my grandfather, a World War II veteran, told stories about his time in the military. Little did I know how much his stories would influence my career, as I have developed a strong passion for working with college student veterans. My grandfather's stories always peaked my interest. Therefore, I hope that fellow colleagues and peers reading this dissertation will feel as though their interests have been peaked as well.

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

College student veterans may experience a variety of challenges as they transition from military life to student life, including adjusting to the academic environment, coping with mental health concerns such as depression and anxiety, redefining their identities, and balancing multiple roles (e.g., family, school, and work). In addition, research indicates that veterans may experience difficulty in finding meaning and purpose outside of the military. The purpose of the current study was to add to the career development literature related to college student veterans and explore variables which may influence meaning and purpose in their lives, specifically career thoughts and depression.

The current study utilized a passive observational research design to survey 132 college student veterans attending higher education institutions across different geographic locations in the United States. Regarding demographic characteristics, participants ranged across ages, military branches, and classification levels. Career thoughts was measured using the Career Thoughts Inventory (CTI), and depression was measured using the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R). Meaning in life was assessed using the presence of meaning and the search for meaning subscales of the Meaning in Life Questionnaire (MLQ). A linear multiple regression analysis was used to determine if the total scores on the CTI and the CESD-R were significant positive predictors of scores on the MLQ. In addition, Pearson correlation analyses were utilized to understand the relationship between meaning in life and depression, as well as meaning in life and career thoughts. Moreover, beyond career thoughts and depression, this study also sought to explore whether or not there were differences in meaning in life scores among particular demographic variables, including gender and ethnicity.

ANOVA analyses were used to examine differences in meaning in life scores among participant gender and ethnicity.

Results of the analyses revealed that both career thoughts and depression were statistically significant predictors of the presence of meaning in one's life, with 46% of the variance in the presence of meaning in life scores accounted for by total scores on the CTI and the CESD-R. Pearson correlation results indicated that all variables were statistically significant at alpha level of .01. Furthermore, results of ANOVA procedures showed no statistically significant differences in the presence of meaning in life scores, as well as in the search for meaning in life scores, for the gender and ethnicity variables. Limitations of the study and areas for future research are discussed. Lastly, implications for practitioners working with student veteran populations are included.

CHAPTER 1

INTRODUCTION

Veterans making transitions to academic environments may experience emotional and mental health concerns, which can interfere with their ability to engage academically and succeed in higher education. In addition, veterans may find themselves encountering other challenges as they transition to the college environment, including adjusting to the academic environment, redefining their identities, establishing new relationships, and balancing multiple roles (e.g., family, school, and work) (Ackerman, DiRamio, & Mitchell, 2009; DiRamio, Ackerman, & Mitchell, 2008; Rumann & Hamrick, 2010). Among these challenges, research suggests that veterans may experience difficulty in finding meaning and purpose outside of the military (Brenner et al., 2008; Doenges, 2011). Given that there is limited data on college student veterans' career development characteristics, it is essential to learn more about variables related to meaning in life among this population, as this may have implications for their vocational achievement and career progression. The current study surveyed a diverse sample of college student veterans to learn more about selected career variables related to meaning and purpose in their lives.

Professional Significance

Student veterans represent a growing population on college campuses and are being actively recruited by higher education institutions (Hamrick, Rumann, & Associates, 2013; Livingston, Havice, Cawthon, & Fleming, 2011; Sander, 2012). This increase in numbers is partly related to passage of the Post 9/11 Veterans Education Assistance Act of 2008 (Sander, 2012). The Post 9/11 G.I. Bill benefits provide an incentive for veterans transitioning to college and university campuses, as well as an opportunity for veterans to pursue their career aspirations

through higher education (Church, 2009; Rudd, Goulding, & Bryan, 2011; Rumann & Hamrick, 2009). Currently, there is an influx of service members making the transition from military life to college life (Barry, Whiteman, MacDermid Wadsworth, & Hitt, 2012b). The Department of Veterans Affairs (2013) recently indicated that one million veterans, service members, and family members have utilized the benefits from the Post 9/11 G.I. Bill since its inception. Due to the reduction of troops in Iraq and Afghanistan, the number of college student veterans who take advantage of the G.I. Bill will likely increase (Bonar & Domenici, 2011).

In addition to being an emerging population on college campuses, some college student veterans, as a subset of the general student body population (Widome, Laska, Gulden, Fu, & Lust, 2011), are likely to experience various challenges in their transition into the college classroom including relearning study skills, coping with mental health concerns (e.g., depression, thoughts of suicide, and symptoms of Post-Traumatic Stress Disorder (PTSD), including insomnia and resurfaced memories), managing unresolved emotions (e.g., anger and stress), experiencing difficulty in transitioning from a rigid, structured environment to one that is distinctively flexible, and finding meaning and purpose in their lives outside of the military (Ackerman et al., 2009; Bauman, 2009; DiRamio et al., 2008; Doenges, 2011; Rumann & Hamrick, 2010). A study conducted by the RAND Corporation estimated that approximately one-third of the service members deployed for Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) will experience one of three conditions including PTSD, major depressive disorder, and Traumatic Brain Injury (Tanielian & Jaycox, 2008). Given the large number of veterans who are transitioning to college campuses, these issues and concerns are likely to impact service members in the classroom and in other campus activities.

Furthermore, the current unemployment rate among military veterans (6.6%), especially those who have served since September 11, 2001 (9%; Bureau of Labor Statistics, 2014), indicates a need for attention to this population's career development concerns. In comparison to their civilian aged counterparts for both males (7.5%) and females (6.8%), the unemployment rate is higher for veterans who have served since September 11, 2001 (also known as Gulf war-era II veterans), with 8.8% of males and 9.6% of females being unemployed (Bureau of Labor Statistics, 2014). Several authors have highlighted the career development concerns of returning veterans including the difficulties experienced in the job preparation and job search processes such as articulating transferable skills, identifying civilian job targets, and translating their accomplishments into non-military terminology (Ackerman et al., 2009; Bauman, 2009; Bullock, Braud, Andrews, & Phillips, 2009; Duggan & Jurgens, 2007; Phillips, Braud, Andrews, & Bullock, 2007; Simpson & Armstrong, 2010). For these reasons, college student veterans may need assistance in making connections between military and civilian occupational skills, knowledge, experience, and opportunities (Engels & Harris, 2002). Lastly, given that some researchers have found that veterans identify a loss of meaning and purpose in their work during the transition to civilian life (Brenner et al., 2008; Doenges, 2011), it would be beneficial to explore variables which influence meaning in the lives of veterans transitioning to college. Some researchers have found that deriving meaning from stressful life experiences can play a critical role in emotional and mental health outcomes (Holland, Malott, & Currier, 2014; Owens, Steger, Whitesell, & Herrera, 2009).

Statement of the Problem

A minimal amount of literature has focused on the career development concerns of veterans, and specifically, college student veterans. A review of the literature found only two

research studies (Doenges, 2011; Gravley, 2012) which examined college student veterans' career development concerns. Given the increase in the number of college student veterans transitioning from military service to higher education (Barry et al., 2012b; Department of Veterans Affairs, 2013), as well as the current unemployment statistics for the veteran population as a whole (Bureau of Labor Statistics, 2014), it is important to further understand career development concerns that may exist within this population.

According to Holland et al. (2014), deriving meaning from stressful life experiences is a salient issue for veterans transitioning to the college campus. Individuals in the military view their work as serving a specific purpose. According to Doenges (2011) and Brenner et al. (2008), the military promotes a sense of meaning and purpose in service members by instilling valuable lessons of discipline, personal character, and confidence, a sense of importance while serving overseas, and a commitment to hard work which allows service members to gain a substantial amount of rank and respect from their fellow service members. Some research has shown that when veterans transition to civilian life, they typically perceive their civilian work as having less value and importance in comparison to their military responsibilities (Brenner et al., 2008). Knowing more about how student veterans experience meaning and purpose as they transition from military to student life can better assist both mental health and career development professionals in further understanding the transitional challenges and experiences they encounter.

Purpose

The current study aimed to explore specific variables which might influence meaning and purpose in the lives of college student veterans, including career thoughts and depression. This study surveyed a diverse sample of college student veterans attending higher education institutions across different geographic locations in the United States to learn more about

selected variables related to meaning and purpose in their lives. The Qualtrics online system was used to distribute the informed consent, demographic questionnaire, three assessments, and referral resources to participants. Based on the goals of the current study, as well as previous literature findings, four research questions and hypotheses are described below.

Research Questions & Analyses

The following research questions and hypotheses were proposed as a result of the gaps in the literature, as well as the current study's purpose:

1) Do career thoughts, as measured by the *Career Thoughts Inventory (CTI)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)*, predict meaning in life, as measured by the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ)*, in a college student veteran sample? How much of the variance in meaning in life can be explained by career thoughts and depression?
2) What is the relationship between meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* total score, in a college student veteran sample?
3) What is the relationship between career thoughts, as measured by the *Career Thoughts Inventory (CTI)* total score, and meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* in a college student veteran sample?

4) Are there significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity?

In response to the research questions above, and informed by the literature review in chapter two, the following hypotheses were proposed:

H1: Total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* will be significant positive predictors of scores on the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ).* There will be significant variance in the presence of meaning in life scores accounted for by total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R).*

H2: There will be a statistically significant negative relationship between the presence of meaning subscale and the CESD-R total score, and a statistically significant positive relationship between the search for meaning subscale and the CESD-R total score. College student veterans who indicate the presence of meaning in one's life will report lower CESD-R scores, and college student veterans who indicate a search for meaning in one's life will report higher CESD-R scores.

H3: There will be a statistically significant negative relationship between the presence of meaning subscale and the CTI total score, and a statistically significant positive relationship between the search for meaning subscale and the CTI total score. College student veterans who indicate the presence of meaning in one's life will have lower CTI total scores, and college student veterans who indicate a search for meaning in one's life will have higher CTI total scores.

H4: There will be no statistically significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity.

The present study utilized a passive observational research design (Shadish, Cook, & Campbell, 2002) which included career thoughts and depression as the two independent variables, and meaning in life as the dependent variable. A variety of statistical analyses were employed to answer the study's research questions. A linear multiple regression analysis was used to answer the first research question, Pearson correlation analyses were utilized to answer the second and third research questions, and ANOVA analyses were used to answer the final research question.

Theoretical Framework

The current study drew upon three theoretical approaches as foundations for the research questions and hypotheses, cognitive information processing theory (CIP; Sampson, Reardon, Peterson, & Lenz, 2004), cognitive behavioral theory (CBT; Beck, Rush, Shaw, & Emery, 1979), and logotherapy and existential theory (Frankl, 1967a; Frankl 1967b). Cognitive information processing theory asserts that individuals can be taught to improve their problem-solving and decision-making skills. Various publications have discussed using this theory with the veteran population (Bullock et al., 2009; Clemens & Milsom, 2008; Hayden & Buzzetta, 2014; Hayden, Green, & Dorsett, 2013; Hayden, Ledwith, Dong, & Buzzetta, 2014; Stein-McCormick, Osborn, Hayden, & Van Hoose, 2013). However, to date, no empirical studies have been found which utilized CIP theory as a framework for research with college student veterans.

One of the hallmarks of CIP theory is its focus on metacognitions, and how career thoughts may impact the decision-making process (Sampson et al., 2004). According to several

researchers, individuals who experience higher levels of negative thinking often encounter additional barriers in the career decision-making process including lack of readiness to engage in decision making, insufficient amount of information about self, options, and/or the decision-making process, and unreliable information (Kleiman et al., 2004; Sampson, Peterson, Lenz, Reardon, & Saunders, 1996a; Sampson et al., 2004). Assessing for negative career thinking can help individuals identify negative thoughts and statements, challenge the usefulness of these statements, alter negative thoughts and reframe them into more positive thoughts, and act in ways that are consistent with the new positive thoughts (Sampson et al., 1996a). CIP theory is related to this study through one of its key independent variables, career thoughts, which was measured utilizing the Career Thoughts Inventory (Sampson et al., 1996a).

The second theory relevant to this study is cognitive behavioral theory (CBT; Beck et al., 1979). This theory asserts that an individual's affect and behavior are influenced by cognitions, and that emotions play a key role in the decision-making process and can often maintain negative cognitions. By reducing negative cognitions, an individual's affect becomes more positive and an individual develops the capability to utilize appropriate resources to solve problems and make decisions. Given the research that shows mental health concerns, including anxiety and depression, are a challenge for veterans returning to college campuses (Barry, Whiteman, MacDermid Wadsworth, 2012a; DiRamio et al., 2008; Elliott, Gonzalez, & Larsen, 2011; Ingala, 2011; Kay, 2011; Morreale, 2011; Rudd et al., 2011; Zinger & Cohen, 2010), and can negatively impact a college student's career decision-making and problem-solving skills (Dieringer, 2012; Saunders, Peterson, Sampson, & Reardon, 2000; Walker & Peterson, 2012), CBT appears to be a useful theory to inform the current research study. CBT theory is related to this study through one of its key independent variables, depression, which was measured utilizing the Center for

Epidemiologic Studies Depression Scale – Revised (CESD-R; Eaton, Smith, Ybarra, Muntaner, & Tien, 2004).

The final theory related to this study was logotherapy and existential theory (Frankl, 1967a; Frankl, 1967b). Logotherapy is a type of psychotherapy which focuses on the future, as well as the meaning individuals will achieve in their future. The emphasis is not on an individual's pathology; rather, it is on helping individuals confront, reorient, and become aware of the meaning in their lives (Frankl, 1992). Frankl (1986) contended that meaning in life is different from person to person, and can change daily and hourly. However, it never ceases to be (Frankl, 1992). The role of a logotherapist is to assist individuals in finding the meaning and purpose of their life, as well as help individuals become aware of the meaning (or *logos*) of their existence (Frankl, 1961). Frankl (1961) describes the search for meaning as a primary force of motivation. Individuals are naturally searching for meaning and purpose in their lives, a concept Frankl referred to as the "will to meaning" (Frankl, 1967a). Through what Frankl (1967a) referred to as an existential analysis, mental health professionals can enable clients to find meaning and purpose in life. Lastly, Frankl (1958) referred to meaning and purpose as a "metaphysical" need, which refers to an individual's desire to describe their purpose in living. He asserted that meaning in life can be discovered three different ways: 1) by doing a deed, 2) experiencing things such as nature, culture, love, and beauty, and 3) through suffering (Frankl, 1992). Logotherapy and existential theory is related to this study through its key dependent variable, meaning in life, which was measured utilizing the Meaning in Life Questionnaire (MLQ; Steger, Frazier, Oishi, & Kaler, 2006). The next section will outline specific delimitations that were anticipated in the current study.

Delimitations

There were a few delimitations anticipated in the interpretation of the findings from this study. Although attempts were made to gather data from a diverse group of student veterans across different geographic locations in the United States, it was anticipated that data collected from student veteran participants might not reflect the diversity which exists among this population. In the current study, the demographic variables which represent the diversity of student veteran populations included gender, ethnicity, and primary military branch of service.

While there are a variety of advantages for using self-report measures including ease of administration, ability to assess constructs that may otherwise be difficult to measure (e.g., meaning in life), and opportunity to study subjective experiences such as happiness and sadness, self-report measures include limitations as well (Heppner, Wampold, & Kivlighan, 2008; Meltzoff, 1998). Because data gathered from this study will primarily be based on self-report measures, it is important to have an understanding of possible limitations which accompany self-report measures including social desirability and response-style biases, as well as the tendency for participants to over and/or under-report (Heppner et al., 2008; Pyrczak, 2013). Self-report measures require participants to report about their cognitions, feelings, and behaviors, and some questions may be perceived as being sensitive to the participant (Heppner et al., 2008; Pyrczak, 2013). Given this information, results from self-report measures may sometimes lack validity, as participants may choose to respond in a socially desirable way. Although the researcher has taken precautions to reduce the limitations of self-report measures (e.g., anonymity and confidentiality of survey responses), it is possible that the use of self-report measures may bias the results of this study.

Lastly, research indicates that there are several advantages and disadvantages in using web-based surveys to conduct empirical research (Galesic, 2006; Hoerger, 2010; Wright, 2005). Despite the various advantages of utilizing online surveys including ease, accessibility, cost, and convenience, as well as the opportunity to conduct research on difficult to reach populations, there are a variety of disadvantages including participant self-selection, increased attrition, inability to track on participants who choose not to complete the survey, possibility of receiving multiple responses from the same participants, invalid email addresses, and participants considering the research invitation to be spam email, all of which have implications for generalizing the findings to the larger population. According to several research studies, web-based surveys which recruit participants through online advertisements typically have an average dropout rate of 30%, and targeted web-based surveys which utilize listservs to recruit participants have an average dropout rate of 15% (Galesic, 2006; O'Neil, Penrod, & Bornstein, 2003). Given that the current study will utilize a web-based survey, it is anticipated that the dropout rate will be similar to what previous studies have found regarding online surveys distributed via listservs.

CHAPTER 2

LITERATURE REVIEW

In the following section, a review of selected literature will be provided. First, an overview of the characteristics of college student veterans will be discussed, followed by insight into the mental health and career development concerns among this population. In addition, literature pertaining to meaning in life and career thoughts will be discussed. Then, the following two sections will review differences in gender and ethnicity among the veteran population. A section related to theoretical underpinning will provide an overview of three theories to help guide the research questions in this study. Finally, a summary of the literature will be provided to further support the rationale for this study.

College Student Veterans

Prior to reviewing literature on mental health and career development concerns which exist in this population, it is useful to understand the characteristics of college student veterans, and how they may differ from their non-veteran peers. This information can be helpful in further understanding the mental health concerns and career development characteristics of this population.

Several authors described student veterans as a subgroup of nontraditional students on college campuses, and indicated that they experience similar transition concerns as nontraditional college students (Green, 2012; Green & Hayden, 2013; Lang, Harriett, & Cadet, 2013). Livingston et al. (2011) referred to student veterans as a "camouflaged population" since they intentionally try to blend into the academic environment, and are often indistinguishable from other students. Bonar and Domenici (2011) noted that members of the ROTC, National Guard, and Reserve are typically traditional aged college students, and indicated that these individuals

represent a small portion of military undergraduates on college campuses. They suggested the largest group of military undergraduates as being older, married, and as having served in the military for a minimum of three years, which may explain why this population is commonly referred to as nontraditional. Furthermore, in addition to being a college student, many student veterans also hold other life roles including partner, parent, soldier (if still on active duty), and civilian (Bonar & Domenici, 2011).

In addition to being a minority group on college campuses, research suggests that student veterans face unique cultural, academic, social, and financial challenges, and are less likely to seek counseling services in comparison to their civilian peers (Bonar & Domenici, 2011; Center for Collegiate Mental Health, 2013; Center for the Study of Collegiate Mental Health, 2009). Student veterans may also experience difficulty connecting with their non-veteran peers (Bonar & Domenici, 2011). For example, Livingston et al. (2011) found that older student veterans (mean age was 25 years; n = 15) were less likely to engage in campus activities and reside in on-campus housing. Student veterans also reported enhanced maturity levels due to their participation in wartime military service (DiRamio et al., 2008; Rumann & Hamrick, 2010). Evidence of enhanced maturity levels in student veterans were reflected in their interview responses, and included the tendency to take college more seriously, express more confidence in their abilities to make practical decisions, and demonstrate a clearer perspective of what is important in life, as well as a deeper understanding of cultural differences and worldview of others (DiRamio et al., 2008; Rumann & Hamrick, 2010).

Student veterans may identify as feeling different and separate from their non-military college peers. In a study conducted by Ingala (2011), a sample of student veterans were asked what sets them apart from their non-veteran college peers. Participants were asked to check all

that apply. Experience (95.8%, n = 137), discipline (85.3%, n = 122), age (83.9%, n = 120), attitude/bearing (83.2%, n = 119), maturity (82.5%, n = 118), and values (76.9%, n = 110) were a few of the responses indicated. Additionally, in a study conducted by Doenges (2011), the same categories were used and student veteran participants (n = 137) were asked what sets them apart from their college peers. The findings were similar to the Ingala (2011) study, with experience (94.3%; n = 133), maturity (87.9%; n = 124), age (84.4%; n = 119), attitude/bearing (79.4%; n = 112), and discipline (79.4%; n = 112) being the top responses.

A number of research studies have found that student veterans are older than their civilian counterparts (Barry et al., 2012a; Barry et al., 2012b; Blosnich, Kopacz, McCarten, & Bossarte, 2015; Whiteman & Barry, 2011; Whiteman, Barry, Mroczek, & MacDermid Wadsworth, 2013), are more likely to be married in comparison to their civilian peers (Barry et al., 2012b; Radford & Wun, 2009; Whiteman & Barry, 2011; Whiteman et al., 2013), and are more likely to be enrolled as full-time students (Whiteman et al., 2013). Using data from two nationally representative surveys of students enrolled in higher education, including the 2007-2008 National Postsecondary Student Aid Study (NPSAS) (n = 114,000 undergraduate students and 14,000 graduate students from approximately 1,700 institutions), and the 2004-2006 Beginning Postsecondary Students Longitudinal Study (BPS) (n = 19 million undergraduates and three million graduate students from 6,000 institutions), the National Center for Education Statistics (NCES) reported that military students encompassed 3% of the undergraduate population nationwide (Radford, 2011; Radford & Wun, 2009). This percentage is equivalent to 657,000 students across the nation. They also found that 73.1% of military undergraduates consisted of males and 26.9% consisted of females. In reference to race and ethnicity, 60.1% of military undergraduates identified as Caucasian, 18.3% African American, 12.8% Hispanic, 3.2% Asian,

and 5.7% as other (including American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander) (Radford, 2011; Radford & Wun, 2009). In addition, for the 2007-2008 academic year, the National Center for Education Statistics (NCES) reported that 43.3% of military undergraduates were enrolled in a public two-year institution, 21.4% in a public four year institution, 13.5% in a private not-for-profit four year institution, and 12.4% were enrolled in a private for-profit institution. Lastly, military undergraduates pursue the following fields of study at a rate higher than their non-military peers: computer and information sciences, engineering and engineering technology, business, social science, and other applied fields such as architecture, law, public administration, and communication.

There is some research which suggests that military graduate students may be a growing population on college campuses. A recent study at one university compiled by Hayden et al. (2014) found that more than half (51%) of the student veteran respondents (n = 92) identified as graduate students. In another recent study of 77 college student veterans, 29.8% were graduate students (n = 22) (Young, 2012). The National Center for Education Statistics (NCES) estimated that military graduate students encompassed 3% of college students nationwide (n = 107,000), including 65% males and 35% females (Radford, 2011). In regards to ethnicity, the National Center for Education Statistics (NCES) reported that 60% of military graduate students identify as Caucasian, 20% African American, 12% Hispanic, 3% Asian, and 5% as other (including American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander) (Radford, 2011). Additionally, very few veterans enter the college setting without transferring prior academic or experiential credit. In a recent study conducted by Lang et al. (2013) and consisting of 741 student veterans, the average number of credit hours transferred was 28. In another study conducted by Morreale (2011) and utilizing a sample of 176 student veterans, 70% of

participants (n = 118) earned 30 or fewer college credits during their time in the service. For participants who did not attend college while serving in the military, the average number of military credit hours earned was 26.

Some studies have shown that student veterans transfer from two-year institutions prior to gaining admission into four-year institutions (Doenges, 2011; Ingala, 2011). This may be because a high percentage of student veterans are first generation college students, and may choose to begin their academic careers by enrolling in courses at two-year institutions. Ingala (2011) found that 56.3% (n = 81) of student veterans surveyed from three different institutions were transfer students, and 41.4% (n = 60) were first generation college students. Doenges (2011) surveyed 137 college student veterans attending 12 institutions, and 68 respondents (48.9%) indicated that they were first generation students and 82 respondents (60%) indicated that they were transfer students.

In summary, the student veteran population is a subset of the general student body population on college campuses. Given the differences between the student veteran population and their non-veteran college peers, including their minority student status, camouflaged reputation, and first generation and transfer student statuses, it is useful to explore how their mental health and career development concerns may differ from the traditional college student population. The following section will review research literature related to mental health concerns which exist among the college student veteran population.

Mental health concerns among student veterans. As noted previously, student veterans often enter higher education with unique characteristics. Upon return from deployment, veterans may enter the college setting with mental health concerns which have the potential to impede their academic success. Yet, to date, very little is known about the presence of mental health

conditions in veterans enrolled in higher education. The few studies that have examined college student veterans found that this population may experience a number of physical, psychological, and emotional issues. Because mental health concerns can potentially be a challenge for veterans returning to college campuses, it is useful to have an understanding of the prevalence of these concerns, as they can impact a veteran's academic performance and career progression.

Rudd et al. (2011) administered one of the first national surveys aimed towards measuring college student veterans' mental health concerns and emotional adjustment. They administered a national survey to 628 student veterans across various college campuses which explored emotional and psychological symptoms including depression, anxiety, suicidality, posttraumatic stress symptoms, and severity of combat-related exposure. Participants in this study consisted of 415 males, 110 females, and diverse ethnic minorities including participants who identified as African American, Hispanic, Asian, and Native American. Results indicated that 34.6% of the sample experienced severe anxiety (n = 152 out of 439 participants), 23.7% experienced severe depression (n = 103 out of 434 participants), 46% indicated previous suicidal ideation (n = 204 out of 441 participants), 45.6% experienced symptoms of posttraumatic stress disorder (n = 194 out of 425 participants), and of those participants who indicated exposure to combat (n = 244), 44.6% indicated that they experienced heavy-combat exposure. Consequently, veterans in this study reported moderate anxiety, moderately severe depression, symptoms which met the clinical cutoff for a diagnosis of PTSD, and heightened risk for suicide. Additionally, a strong relationship was found between suicide attempts and depression, as well as between suicide attempts and PTSD. That is, 60% of individuals who reported a previous suicide attempt also experienced severe depression, and 82% of individuals who reported a previous suicide attempt also experienced greater levels of PTSD symptomology. Moreover, the mental health

concerns reported in this study exceeded those of the general college student population, as well as veterans seeking mental health services from VA medical centers, which may be indicative of the mental health concerns which exist among this population.

Another study explored psychological distress and mental health service utilization in a sample of 49 college student veterans who had experienced deployment at least once during their military service (Kay, 2011). Participants in this study consisted of 39 males and 10 females. A large majority of participants identified as Caucasian (95.9%, n = 47), however, a wide range of military branches were represented including Army (40.8%), Marines (18.4%), Army National Guard (16.3%), Navy (10.2%), Army Reserves (6.1%), and Air Force (4%). Participants completed measures related to general psychological distress, PTSD, and alcohol use. Results found that almost 50% of the college student veterans in this study (n = 24) reported using mental health services since they began their military service, and 36.7% (n = 18) reported the use of medication for a mental health concern since their military service. For instance, 30.6% (n = 15) of participants reported being treated for PTSD since their military service, 36.7% (n = 18) of participants had been treated for depression, 42.9% (n = 21) for anxiety, 12.2% (n = 6) for alcohol use, 2% (n = 1) for substance use, and 10.2% (n = 5) for traumatic brain injury. Kay (2011) also found that the prevalence of PTSD in the college student veteran population (n = 49) exceeded that of the general veteran population, as evidenced by the high percentage of participants (24.5%, n = 12) who screened positive for a diagnosis of PTSD. In regards to mental health service utilization, 30.6% of participants (n = 18) indicated prior treatment for PTSD, 36.7% (n = 18) indicated prior treatment for depression, 42.9% (n = 21) for anxiety, and 12.2% (n = 6) for alcohol use.

Some research has shown that veterans perceive mental health care as a sign of weakness (Bonar & Domenici, 2011; Kay, 2011). In regards to why college student veterans may not seek psychological services, Kay (2011) found that college student veterans in her study strongly endorsed two items, the first being that others would see them as weak, and the second being that members in their unit (i.e., peers, coworkers) would have less confidence in them. Additional items that were endorsed included fear of potential harm to their careers, unit leadership treating them differently, and concern that their mental health visit would not be kept confidential. There was also a significant negative relationship found between stigma and help seeking behavior. Meaning, individuals who reported greater stigmatization towards seeking psychological services, as measured by the Stigma and Barriers to Care Scale, indicated fewer positive attitudes about seeking professional help, as measured by the Attitudes Towards Seeking Professional Psychological Help Scale – Shortened Form (ATSPPHS-SF). A limitation of this study is that data was drawn from a single university and may not be representative of the general college student veteran population. Additionally, having a larger number of college student veterans (n = 49) would have enhanced the statistical power and generalizability of the study's findings.

Zinger and Cohen (2010) studied the challenges veterans face as they transition from military life into their roles as college students. They conducted structured interviews with 10 veterans who had returned from Iraq or Afghanistan and enrolled in a community college. Participants consisted of nine males and one female, and ranged in ethnicity including Hispanic, Asian, West Indian, and Eastern European. Line-by-line coding was utilized to code the data. One of the themes found in this qualitative study was difficulty coping with symptoms of PTSD, depression, and anxiety, all of which interfere with a veteran's ability to appropriately function in the academic setting. For instance, participants indicated feelings of numbness, sadness, and

intense emotions such as anger, fear, stress, and rage. Participants also indicated that they experienced vivid memories, difficulty sleeping, and hyperarousal. Additionally, similar to the findings of the Rudd et al. (2011) study, participants in this study reported other mental health disorders that often co-occur with PTSD including substance abuse, depression/hopelessness, and suicidal thoughts and feelings. Limitations of this study included a small sample size, the use of one institution to gather data from participants, and the inclusion of minimal female participants.

The Center for the Study of Collegiate Mental Health (CSCMH; 2009) surveyed 132 college and university counseling centers and obtained information related to a population of college students receiving mental health services. Out of 23,000 students that were surveyed, 2% (n = 453) indicated a history of prior military experience, and 30% of these respondents reported experiencing a traumatic event accompanied by ongoing chronic symptoms. In comparison to non-military college students and military students who did not experience trauma, military students who did experience a traumatic event had significantly higher rates on the following subscales of the Counseling Center Assessment of Psychological Symptoms (CCAPS) instrument: generalized anxiety, hostility, and family distress. Almost 45% of military students who experienced a traumatic event indicated that they easily become angry, experienced thoughts they cannot control, and had no one who understands them.

In addition to the 2009 study, the Center for Collegiate Mental Health (CCMH, 2013) gathered additional data from college students who sought treatment from 132 university counseling centers during the 2012-2013 academic year. Out of 72,553 respondents, 1.8% indicated that they served in the military. This statistic indicated a very low proportion of student veterans who were seeking mental health services from college and/or university counseling

centers. In addition to being asked about treatment, military individuals were also asked if the traumatic and/or stressful events they were exposed to during their time in the military were impacting them currently (n = 1192). Results found that 32.6% responded "yes," suggesting that mental health concerns such as PTSD and depression may influence the transition from soldier to student. Lastly, when college students (n = 20, 411) were asked to select traumatic experiences they had been exposed to, 0.3% (n = 231) indicated exposure to combat and war zone experiences.

Mental health as a result of combat. Experiencing symptoms of PTSD, depression, or anxiety can exacerbate a veteran's transition into student life, and can influence a veteran's academic performance, persistence to remain to school, and motivation to engage in academic tasks (Barry et al., 2012a; Zinger & Cohen, 2010). For instance, the physical, emotional, and behavioral symptoms of PTSD including difficulty sleeping, nightmares, flashbacks, trouble concentrating, and feelings of intense anger, fear, and nervousness, can impair an individual's ability to function appropriately in the academic environment (Barry et al., 2012a). According to Barry et al. (2012b), service members may develop mental health concerns as a result of their active duty deployment including PTSD, mood and anxiety disorders, depression, and panic attacks. In fact, multiple deployments, which typically increase exposure to combat trauma, were the best predictor of a service member developing a mental health diagnosis (Church, 2009; Elliott et al., 2011; Kaplan, 2008). This section will review the results of previous studies that have found combat exposure to be related to student veteran mental health outcomes.

Barry et al. (2012a) surveyed 248 participants attending 16 different institutions to determine the prevalence of posttraumatic stress symptoms among student veterans exposed to combat. In this study, there were three groups being compared to student service

members/veterans who were exposed to combat (n = 78), including student service members/veterans who were not exposed to combat (n = 53), students enrolled in ROTC (n = 38), and civilian students (n = 79). Results indicated that student service members/veterans who were exposed to combat reported greater posttraumatic stress symptoms in comparison to their civilian counterparts, ROTC students, and student service members/veterans who did not experience exposure to combat. This study's results highlight the different physical, mental, and behavioral symptoms that combat-exposed student veterans experience in comparison to their non-combat exposed student veteran and civilian peers including difficulty sleeping and concentrating, nightmare and flashback experiences, and use of alcohol, tobacco, and other substances. Limitations of this study included the use of self-report measures, as well as possible self-selection bias.

In a study completed by Blosnich et al. (2015), the authors compared a sample of student service members who were exposed to hazardous duty (n = 344) to service members who were not exposed to hazardous duty (n = 362) to determine differences related to mental health outcomes and suicide risk. The majority of participants primarily identified as male (66.7%, n = 462) and Caucasian (74.5%, n = 522). Results of a logistic regression model found that student service members who were exposed to hazardous duty were twice as likely to seek psychiatric services and receive mental health diagnoses/treatment within the past 12 months, when compared to student service members who were not exposed to hazardous duty. Related to suicide risk, student service members who were exposed to hazardous duty were less likely to report suicidal ideation in the past 12 months, when compared to student service members who were not exposed to hazardous duty. Limitations of this study included the absence of valid,

reliable measures, in addition to the lack of a clear definition for the term "hazardous duty" (Blosnich et al., 2015).

Elliott et al. (2011) gathered data from 104 college student veterans to determine factors which cause alienation on the university campus. Results found that exposure to combat predicted greater frequency of PTSD symptoms, as well as greater alienation on campus. Presence of PTSD symptoms also predicted more strain in intimate relationships, as well as more problems with alcohol use. Young (2012) found similar results to Elliott et al. (2011) when examining the influence three risk factors (pre-deployment risk factors, combat exposure, and deployment length) had on a sample of 77 college student veterans. Results found that combat exposure significantly predicted PTSD, with 32% of the variance in PTSD scores accounted for by combat exposure.

DiRamio et al. (2008) conducted qualitative interviews with 25 college student veterans attending three different institutions and utilized pattern coding, a qualitative technique which classifies the data into themes, to analyze the data. All participants had recently served in an Iraq or Afghanistan conflict, and had made the transition from active duty to the college campus. In this study, nine participants attended college prior to being deployed. These individuals referred to their experiences of being called to active duty (while still attending college) as "depressing," and described the frustration and disruption associated with feeling as though they had to start all over again each time they returned to the academic classroom. Among the 16 themes which emerged from this study, three were related to mental and physical health concerns, including combat duty, students with disabilities, and mental health and PTSD. Although the focus of this study highlighted challenges combat veterans encounter in their transition from military to college, many participants indicated that they experienced a myriad of situations in which they

were injured themselves or witnessed the injury of others. Moreover, several participants in this study had documented disabilities, or had acquired a physical disability as a result of serving in a combat zone.

Morreale (2011) utilized a sample of 176 student veterans representing all branches of the United States military to explore the relationship between academic motivation and academic self-concept in relation to a student veteran's demographic characteristics, military experiences, and educational experiences. In this study, 127 student veterans (72.2%) indicated that they were deployed at least once and 57.4% (n = 101) were deployed to either Iraq for Operation Iraqi Freedom (OIF) or Afghanistan for Operation Enduring Freedom (OEF). Results found that one-quarter of participants (25%, n = 44) indicated that they were receiving treatment for a physical health issue (i.e., taking medicine, seeing a professional) as a result of their combat/military experience. In regards to mental health issues, 20% (n = 35) indicated that they were taking medicine or seeing a professional for their mental health concerns as a result of combat/military experience. Approximately 15.3% of these student veterans (n = 27) indicated that their physical health prevented them from engaging in daily activities, and approximately 17.6% (n = 31) indicated that their mental health prevented them from engaging in daily functions.

Ingala (2011) investigated the extent to which military deployments influence a veteran's adjustment to college life. Of the 146 participants who responded to the demographic questionnaire, 91.9% (n = 134) indicated being deployed between one and three times, and 95.2% (n =139) indicated deployment to a combat zone. Almost half of participants (46%, n = 58; participants may have indicated more than one category) reported a permanent physical injury as a result of military deployment. Examples included traumatic brain injury (18.8%), internal injuries (12.5%), and hearing loss (53.1%), all of which have implications for a college

student veteran's academic and career success. A quarter of participants reported a PTSD diagnosis (25.4%, n = 35), 35% (n = 50) sought mental health counseling since their deployment, and 13.2% (n = 18) were currently taking prescription medication for PTSD, depression, anxiety, or sleeping. Student veterans who reported higher levels of PTSD symptoms tended to have significantly lower levels of college adjustment. Results also found that 56% of the variance in college student adjustment could be explained by a student veteran's combat experiences, number of deployments, PTSD symptoms, prior injury, unit support, and post-deployment support.

The studies which examined mental health concerns in college student veterans provide some evidence that veterans making the transition to the academic environment may experience emotional and mental health difficulties, all of which have the potential to interfere with their ability to engage academically and succeed in higher education. In addition, being exposed to combat while in the military can negatively impact a veteran in the classroom setting (Ackerman et al., 2009). Given that mental health concerns may influence a college student's self-perceptions, career decision-making, and problem-solving skills (Dieringer, 2012; Saunders et al., 2000; Walker & Peterson, 2012), it would be useful to explore the career development concerns which exist in this population. The following section will review literature on veterans' career development concerns.

Career development concerns. Several authors have explored the career development concerns of returning veterans (Ackerman et al., 2009; Bauman, 2009; Bullock et al., 2009; Duggan & Jurgens, 2007; Phillips et al., 2007; Simpson & Armstrong, 2010). Simpson and Armstrong (2010) highlighted prevalent themes that have emerged in the career development literature including culture shock, transferable skills, job preparation, job search concerns, and

financial concerns. Culture shock relates to service members' military identities and having to leave behind their military ranks to pursue civilian employment. Culture shock can also refer to changes that have occurred in previous positions while service members were deployed. Although veterans often obtain a variety of transferable skills as a result of their military experiences, it may be a challenge for these individuals to identify, translate, and articulate these skills to civilian employers. In addition to the complexity veterans may encounter in understanding how their transferable skills relate to the civilian job market, they may also experience difficulty searching, preparing, and applying for jobs (Simpson & Armstrong, 2010). Veterans may also experience financial concerns upon exiting the military including relocation expenses, utility connection fees, and meals. Some veterans may worry about their inability to earn a stable income after exiting the military, and have expressed concerns regarding the impact that the current job market has on their ability to secure stable employment. Lastly, in their summary of the literature related to veteran career development concerns, Simpson and Armstrong (2010) discussed the impact that mental health concerns such as PTSD, anxiety, and depression can have on the transition to civilian employment. For example, flashbacks, hyper-vigilance, irritability, and difficulty sleeping can impact veterans' ability to return to the workplace, or even impact their self-efficacy when disclosing this information to employers or fellow coworkers.

In their review of the veteran literature, Duggan and Jurgens (2007) indicated that veterans encountered a variety of barriers related to their career success including structural, individual, and health barriers, all of which can influence an individual's vocational behavior. Structural barriers include translating military jargon into civilian terms and transferring credentials earned in the military into civilian credentials. Individual barriers refer to veteran

discharge status, transitioning from military to civilian culture (e.g., paying for rent or mortgage, preparing meals, accessing healthcare), and adjusting family roles and responsibilities. Health barriers include physical and mental health conditions, which directly influence an individual's vocational achievement (Duggan & Jurgens, 2007). Additionally, in an article related to assisting veterans with their career goals, Phillips et al. (2007) suggested that veterans may experience multiple barriers to employment including gaps in employment, homelessness, physical disabilities, alcohol or drug abuse problems, mental health concerns, and criminal histories.

There is limited quantitative research on the specific career development concerns of college student veterans. A recent study by Gravley (2012) utilized quantitative research methods to explore the career decision self-efficacy (CDSE) of 67 college student veterans attending the same institution, and their use of career services. Data was collected through an online survey and results found that student veterans displayed high levels of career decision self-efficacy (mean score of 4.2 on the Career Decision Self-Efficacy Scale – Short Form (CDSE-SF)), indicating confidence in their ability to perform educational and career tasks. Almost half (46.3%) of the student veterans surveyed indicated that their military careers did not align with their civilian career goals. A significant difference was found between the CDSE reported by student veterans whose military careers aligned with their civilian career goals and those whose career goals did not match their occupational experience in the military. Students whose military careers aligned with their future career goals reported higher CDSE. However, confidence of student veterans whose career goals did not align with their military occupations was still high overall. In analyzing the subscale scores of the CDSE scale (i.e., self-appraisal, occupational information, goal selection, planning, and problem solving), student veterans whose military careers aligned with their civilian career choices reported higher self-appraisal,

occupational information, planning, and problem solving. There were two CDSE subscale scores (planning and problem solving) which were suggested as areas of intervention to improve student veteran CDSE, because participant range of scores on these two subscales were below the threshold, suggesting that a portion of student veterans (19.4%) did not feel confident in their abilities to perform actions and overcome difficulties when making a career decision. Low scores on the CDSE subscales indicate that other factors, such as negative career thoughts, anxiety, stress, and family, could be impacting a student veteran's confidence in making career decisions. In addition to gathering relevant self-report data from participants, a limitation of this study was that the Career Decision Self-Efficacy Scale – short form (CDSE-SF) was the only validated measure utilized.

Very few studies have explored the career development concerns of college student veterans. With the increase in veterans transitioning from military into higher education, and from higher education into the civilian workforce, it is important to understand the career development concerns of this population. Veterans may often encounter a variety of difficulties related to their career development, including coping with physical and mental health concerns, translating military skills into civilian terminology, handling financial concerns, and transitioning from military to civilian culture. Another difficulty veterans may encounter during the transition to civilian life is finding meaning and purpose in their lives outside the military. These difficulties will likely impact a veteran's ability to make career decisions and obtain employment. Given this information, the following section will provide an overview of the literature pertaining to meaning in life, and how this relates to the veteran population.

Meaning in Life

In recent years, research has emphasized more positive dimensions of psychological adjustment, and ways in which individuals thrive under adversity. Variables such as post-traumatic growth (Calhoun & Tedeschi, 2001), morale (Britt, Dickinson, Moore, Castro, & Adler, 2007), social support (Whiteman et al., 2013), resiliency (Young, 2012), hope (Niles, Yoon, Bahn, & Amundson, 2010), and hardiness (Alfred, Hammer, & Good, 2013) have been noted as positive psychological constructs in the literature. Another variable that has begun to gain attention in the empirical literature is meaning. Meaning in life can play a central role in an individual's life, and more specifically, in adverse situations (Park & Ai, 2006). According to Heintzelman and King (2014), meaning in life is a "cornerstone of well-being" (p. 561), and there are several benefits of incorporating meaning into one's life including assisting individuals in coping (Britt, Adler, & Bartone, 2001), serving as a buffer against psychological distress including PTSD and depression (Owens et al., 2009), and enhancing quality of life including an increase in positive emotions such as love and joy, greater life satisfaction, enhanced self-esteem, and optimism (Steger et al., 2006).

In his book, *Man's Search for Meaning,* Victor Frankl, a victim of the Holocaust and survivor of the Nazi concentration camps, describes the concept of *will to meaning* (Frankl, 1959). This refers to the idea that individuals strive to find meaning in their existence, and that it is a primary force of motivation for humans to search for meaning in life. Frankl also noted that meaning in life is inherent, differs from person to person, and never ceases to be. He asserted that individuals can survive harsh conditions knowing there is meaning in one's life, tasks to be fulfilled, and accomplishments to achieve. Even through suffering and traumatic experiences,

including incurable diseases, loss of a loved one, and living with a disability, Frankl asserted that individuals can find meaning (Frankl, 1959).

In addition to meaning in life being an important component of human existence, Heintzelman and King (2014) indicated that it is commonplace, and is not considered to be a rare experience. This statement is based on descriptive statistics provided from conducting a literature review on two meaning in life measures, as well as the results of experimental research related to the construct of meaning in life. Meaning in life is adaptive, suggesting that it is created by the individual experiencing it, and is considered to be an essential component to one's survival. For example, in Heintzelman and King's (2014) review of the literature on meaning in life, the authors noted that meaning in life is positively associated with social connectedness, positive affect, and stimulus coherence (defined as regularity, patterns, and associations), and individuals essentially need all of these to survive. Meaning in life is characterized as a basic human need, and can be defined as a life which has purpose, possesses significance, and cognitively makes sense to the person living it. It is a general sense that our lives matter (Heintzelman & King, 2014).

Heintzelman and King (2014) conducted a literature review on two measures of meaning in life, an older measure, the Purpose in Life test (PIL; Crumbaugh & Maholick, 1964), and a newer measure, the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ; Steger et al., 2006). In this study, researchers gathered means reported on these two measures to determine significant differences from the scales' overall midpoints. Sample characteristics were explored (including undergraduate samples, adult samples, and older adult samples), and samples in which participants had experienced life challenges were also explored (i.e., disability, trauma, alcohol or drug abuse). Scores were significantly above the midpoint of the scale for both the

PIL and MLQ measures for all samples. Overall, the results from both the older and newer versions of these measures indicated that life is pretty meaningful.

In reference to the college student literature, the presence of meaning in life has been found to be negatively correlated with career indecision and state anxiety (Miller & Rottinghaus, 2014). It is also a factor which enhances hope and serves as a buffer against suicidal ideation (Dogra, Basu, & Das, 2011). In a recent study conducted by Schnetzer, Schulenberg, and Buchanan (2013) with 267 college students, the authors found that meaning in life is a significant predictor of alcohol use. Duffy and Sedlacek (2010) conducted a study with 2,432 first year college students, and found that the search for meaning in life is negatively correlated with life satisfaction (Duffy & Sedlacek, 2010), and college students who indicated presence of a career calling reported that their lives are more meaningful (Duffy & Sedlacek, 2010). Lastly, a sample of 101 freshmen college students who indicated that their lives were purposeful also performed better academically (Olivera-Celdran, 2011).

In regards to the occupational context, research has demonstrated that meaning in life positively correlates with satisfaction with vocational activities including volunteer and paid work (Littman-Ovadia & Steger, 2010). Littman-Ovadia and Steger (2010) gathered data from three different samples including two groups of volunteers which consisted of 100 adolescents and 100 adults, and one group of working adults, which consisted of 102 diverse women, to understand the relationship between endorsement of character strengths and strengths deployment, and how these relate to three outcome variables: satisfaction with vocational activities, meaning in life, and well-being. Character strengths referred to a participant's endorsement of key strengths including curiosity, creativity, gratitude, hope, and humor. Strengths deployment referred to the extent in which individuals utilized each of their character

strengths in the workplace setting. An integrative model was tested for each of the three samples. In the first two samples (which consisted of volunteers), deploying character strengths led to satisfaction from the volunteer activity and greater meaning in life. Results indicated that in all three samples, endorsement of character strengths was related to meaning in life or meaning in work. Recognizing and utilizing one's character strengths was directly related to greater satisfaction in the workplace, greater well-being, and higher reports of meaning in work and life. This study emphasizes the importance of both paid and volunteer work, and the impact that vocational activity can have on meaning in life.

Research has also found that the presence of meaning in one's life is positively correlated with calling, life satisfaction, and career decision self-efficacy (Steger & Dik, 2009). Steger and Dik (2009) explored the relationship between meaning in one's life and meaning in one's career, and the relationship these two variables had with well-being and career attitudes. Well-being was assessed using a measure of life satisfaction and depression, and career attitudes were assessed using a career self-efficacy measure. Results found that individuals who reported meaning in their careers indicated greater life satisfaction, meaning in life, and career decision self-efficacy, and less depressive symptomology. In addition, individuals who experienced meaning in their lives as a whole were more likely to experience meaning in their careers.

Researchers indicate that some individuals may experience the presence of meaning in their lives, while others are in the process of searching for meaning, and that these two constructs are not mutually exclusive (Heintzelman & King, 2014; Steger et al., 2006; Steger & Kashdan, 2007). For example, in Steger and Kashdan's (2007) longitudinal study of the MLQ, they found that MLQ-search scores at time one shared little variance (10%) with MLQ-presence scores at time two, indicating that the search for meaning in life does not mean that individuals will

achieve meaning in life one year later. In addition, MLQ-presence scores at time one shared moderate variance (53.7%) with MLQ-search scores at time two, indicating that individuals who find their lives to be meaningful are less likely to be searching for meaning one year later.

Given that meaning in life is associated with a number of psychological and emotional benefits, it may be considered an important construct for individuals to attain. In general, meaning in life has been shown to increase satisfaction with occupational activities, enhance career decision self-efficacy, minimize career indecision, and buffer against psychological distress. Given the impact that meaning in life can have on an individual's career and mental health concerns, it would be useful to explore this variable among college student veterans. The following section will provide an overview of literature addressing the construct of meaning in life among the broader veteran population.

Meaning in life and veterans. Several studies have examined meaning in life in the broader veteran population. According to three clinical case examples provided by Southwick, Gilmartin, Mcdonough, and Morrissey (2006), veterans coping with mental health concerns typically felt as though their lives lacked meaning and/or purpose due to the suffering, guilt, and loss experienced during military service. These authors also contended that the loss of meaning and purpose may be a potential barrier to therapeutic change, and affect many areas of psychosocial functioning. Given the challenges veterans may face when transitioning from military to civilian life, it would be useful to explore empirical research which has investigated this variable among the general veteran population.

Brenner et al. (2008) conducted qualitative interviews with 16 OEF/OIF veterans who were exposed to combat, and explored three risk factors as they relate to suicidal behavior including habituation to pain, perceived burdensomeness, and failed belongingness. Participants

ranged from ages 18-55, primarily identified as male (93%), and specified the Army (75%) or Marines (25%) as their primary military branch of service. This study utilized Joiner's (2005) theory of attempted and completed suicide as a foundation to support the assertion that individuals are at higher risk of suicide if they 1) have been repeatedly exposed to painful and fearful stimuli (i.e., combat, mortar attacks, explosions), 2) feel as though they are a burden to individuals in their social support group (i.e., family, friends, society), and 3) have failed attempts of creating and sustaining interpersonal relationships (known as failed belongingness).

When participants were posed questions about their ability to cope with feelings of burdensomeness, a theme which emerged was the loss of a sense of self and purpose and having to redefine their identities once they transitioned to civilian life. When speaking about their military experiences, participants indicated feeling a sense of importance while serving overseas, and described the hard work that went into gaining a substantial amount of rank and respect from their fellow service members. When discussing their civilian responsibilities, these activities were seen as having less value in comparison to military duties and responsibilities. Participants reported feeling confused about how to reintegrate into civilian society and uncertain about how to reestablish their sense of self. In addition, participants reported several ways in which they established meaning and purpose in their transition to civilian life. Examples included pursuing higher education, engaging in new hobbies, seeking professional help, and reconnecting with family members. This study highlights the importance of meaning and purpose as veterans transition from military to civilian life, and also emphasizes that loss of a sense of self and purpose in one's work may be strong predictors of burdensomeness and risk of potential suicide among military veterans. Given this information, it is essential to conduct research on the

constructs of meaning and purpose in college student veterans, as this can be a potential risk factor for suicidal behavior (Brenner et al., 2008).

Owens et al. (2009) examined the impact that age, combat exposure, depression, meaning in life, and guilt have in relation to predicting PTSD severity in a sample of 174 veterans who had served in various service eras including World War II, Korean War, Gulf War I, Iraq, and Afghanistan. Participants in this study consisted of 91% males and 93% Caucasians. Individuals completed an online survey, and results found that age, combat exposure, depression, presence of meaning in life, and guilt significantly predicted PTSD severity, accounting for 47% of the variance in PTSD symptomology. Results also indicated that PTSD severity increased for participants who reported greater exposure to combat, depression, and guilt, and less meaning in their lives. Significant negative correlations between meaning in life and the following three variables were found: PTSD, depression, and guilt. In other words, participants who reported less meaning in their lives were more likely to report symptoms of PTSD and/or depression, as well as feelings of guilt. This study highlights the importance of using meaning in life as a treatment intervention for veterans who have been exposed to trauma (Owens et al., 2009).

Bryan et al. (2013b) completed regression analyses to determine whether or not meaning in life predicted emotional distress, suicidal ideation, and life functioning in a sample of 273 active duty military personnel (Air Force Security Forces). Participants identified as 67.8% Caucasian, 20.5% African-American, 2.2% Native American, 0.7% Asian, and 0.4% Pacific Islander. In addition, 81% of participants consisted of males and 18.3% consisted of females. Results found that a stronger sense of meaning in life was significantly associated with less emotional distress (4.7% variance), less severe suicidal ideation (1.4% variance), and better life functioning (7.3% variance). The relationship between meaning in life and four life domains

including work, intimate relationships, non-family relationships, and leisure activities was also explored. Results found that a stronger sense of meaning in life was significantly associated with all four domains, signifying that participants who indicated a higher presence of meaning in life reported stronger work performance, enhanced relationships with both family and non-family members, and fulfillment in leisure activities. Meaning in life was significantly negatively correlated with emotional distress, suicide attempt, and suicidal ideation. Results of this study demonstrate the importance of addressing meaning in life among military personnel, and the impact this can have on daily functioning, emotional distress levels, occupational performance, and suicidal behavior. This study also identified meaning in life as a protective factor among military personnel, which can assist in reducing risk for suicidal ideation and assisting service members in finding ways to positively cope with potential mental health concerns.

Bryan et al. (2013a) surveyed 181 active duty Air Force personnel to determine factors which contribute to a veteran's meaning in life including exposure to traumatic events (non-combat related), deployment trauma (including combat exposure and exposure to aftermath events), and negative affect. A large majority of the participants were male (79.4%), 59.8% identified as Caucasian, 23.3% African American, 2.6% Native American, 1.1% Asian American, .5% Native Hawaiian, 9% other, and 4% unknown. Results indicated that the presence of meaning was significantly negatively correlated with negative affect, as well as the search for meaning. In addition, exposure to traumatic events was significantly positively correlated with number of deployments, combat exposure, exposure to aftermath events, and negative affect. Gender differences were explored in relation to trauma exposure, and the only significant difference found was related to exposure to aftermath events, with males reporting significantly greater exposure to aftermath events than females. Results of a regression analysis indicated that

several variables significantly influenced a veteran's meaning in life including number of deployments, trauma exposure (non-combat related), combat exposure, and negative affect. In other words, greater meaning in life was associated with a higher number of deployments, less exposure to traumatic events that were non-combat related, less exposure to combat, and fewer negative emotions. When adding gender with combat exposure (gender x combat exposure) to the regression model, results indicated a significant interaction. Male veterans who experienced lower levels of combat exposure reported greater meaning in life in comparison to female veterans, and male veterans who experienced greater levels of combat exposure reported less meaning in life in comparison to female veterans. In addition, results of another regression analysis indicated that the search for meaning in life was significantly associated with less exposure to traumatic events that were non-combat related and greater negative emotions. This study provides relevant information related to factors which may influence a veteran's meaning in life including number of deployments, as well as stressful and/or traumatic experiences. Lastly, this study is one of the only studies which reviewed gender differences in relation to combat exposure and meaning in life. Limitations of this study included the use of self-report measures, as well as the use of a single military branch (e.g., Air Force).

Fontana and Rosenheck (2005) utilized data from the National Vietnam Veterans Readjustment Survey (NVVRS) (n = 1,168 veterans) to determine the impact that meaning in life has on a Vietnam War veteran's pursuit of mental health services. Participants in this study identified as Caucasian (49%), African American (27%), Latino (23%), and other (1%). In comparison to Vietnam veterans who reported a low loss of meaning as a result of their military experiences, veterans who reported a high loss of meaning were more likely to seek assistance from clergy (n = 1, 168). Among those participants who sought assistance from mental health

service providers (n = 267), veterans who reported a high loss of meaning were more likely to seek assistance from a Veteran Affairs (VA) mental health professional than from a non-VA mental health professional. Among the subset of participants who sought assistance from the VA (n = 125), participants who reported a high loss of meaning were more likely to seek assistance from clergy in addition to seeking assistance from the VA. As a result, it is important to address the role of meaning in the lives of military veterans who have experienced difficulty coping or exposure to traumatic events.

Given that a large majority of research emphasizes the negative consequences of working under stressful conditions (i.e., mental health concerns, physical disabilities), Britt et al. (2007) was interested in understanding the positive responses that U.S. Army soldiers experienced from working under these conditions. This study investigated the influences that morale and depression have on deployment outcomes, as well as the influence that meaningful work has on an Army soldier's morale. Participants included 1,685 U.S. Army soldiers who were deployed on a peacekeeping operation in Kosovo, and consisted of 92% males and 8% females. Regarding ethnicity, participants identified as Caucasian (59%), African American (21%), Hispanic American (11%), Asian American (2%), and other (7%). Data was collected during mid-deployment and post-deployment. At mid-deployment, measures of morale, depression, deployment stressors, and exposure to traumatic events were administered. At post-deployment, participants were assessed for PTSD, as well as asked questions about the costs and benefits of deployment. In this study, morale was defined as the energy, enthusiasm, and motivation an individual directs toward a military operation and meaningful work was operationalized as contributing to the military unit's mission (task significance), possessing a sense of pride in one's military role (military pride), and feeling that one's performance on the job matters (job

engagement) and is challenging (challenge at work). Results found strong, positive correlations between measures of meaningful work and morale, suggesting that U.S. Army soldiers who engaged in meaningful work reported more energy, enthusiasm, and motivation towards their military operation. Depression was found to be negatively correlated with meaningful work at mid-deployment. Results also indicated that measures of meaningful work were significantly positively correlated with perceived benefits of deployment, a construct that was assessed at post-deployment. In addition, results of structural equation model analyses indicated that engagement in meaningful work was a strong predictor of benefiting from a deployment experience, and that morale served as a function of this relationship. Engagement in meaningful work predicted benefits of deployment and morale. Furthermore, depression predicted PTSD and negative perceptions of deployment, but negative experiences during deployment (such as events, stressors, and work overload) served as a function of this relationship. A limitation of this study was the reliance upon self-report measures. Results of this study demonstrate the importance of military veterans engaging in meaningful work, as this can prevent negative consequences experienced from deployment (Britt et al., 2007).

Kleftaras and Psarra (2012) explored the relationships between meaning in life, depression, and general psychological health among a sample of 401 Greek Navy men ranging from ages 18-30. Using the Purpose in Life (PIL) measure, this study investigated several dimensions of meaning in life including 1) contentedness with life, 2) goal achievement, 3) freedom of choice, and 4) death. General psychological health was assessed using the following factors: somatic symptoms, anxiety/sleep disturbances, social dysfunction, and severe depression. Results found a statistically significant, negative correlation between meaning in life and depression. Negative correlations were also found between depression and all the

dimensions of meaning in life. Two dimensions of meaning in life, connectedness with life and goal achievement, yielded statistically significant correlations with depression. In addition, the sample (n = 401) was divided into three different groups, low, moderate, and high depressive symptomology, and a one-way ANOVA was conducted to assess for differences across the dimensions of meaning in life. Results of the ANOVA analyses found significant differences between the three groups of depressive symptomology and the following variables: contentedness with life, goal achievement, and the meaning in life total score. Participants who indicated higher levels of depression had lower mean scores on the dimensions of meaning in life. A person's involvement in activities (i.e., social, political, athletic, or cultural) demonstrated a decrease in depression and an increase in meaning in life. Statistically significant negative correlations were found between general psychological health and meaning in life, as well as between the dimensions of general psychological health (i.e., somatic symptoms, anxiety/sleep disturbances, social dysfunction, and severe depression) and meaning in life. Overall, higher meaning in life scores were associated with fewer health concerns. Participants were also divided into two groups, lower meaning and higher meaning, and results of t-test analyses indicated that lower meaning in life scores were associated with higher mean scores among all general health variables (somatic symptoms, anxiety/sleep disturbances, social dysfunction, and severe depression, and total score). Two important limitations of this study included the omission of female participants, and lack of external validity. The authors indicated that the results of this study can only be generalized to newly recruited males in the Navy. Nevertheless, the results of this study highlight an important correlation between meaning in life and depression within a military sample. Also of importance, are the two dimensions of meaning in life (contentedness with life and goal achievement) and the relationship they have with depression. These results

have implications for better understanding the career development needs of a military population (Kleftaras & Psarra, 2012).

Britt et al. (2001) investigated the potential benefits that 161 U.S. Army soldiers derived from participating in a peacekeeping mission in Bosnia. Participants consisted of 91% males and 9% females. In reference to ethnicity, participants identified as Caucasian (56%), African American (23%), Hispanic American (15%), and other (6%). Researchers utilized two variables to determine whether or not participants derived benefits from a stressful life event, including hardiness and meaning in work. In this study, stressful life event was associated with participating in the peacekeeping operation in Bosnia. Hardiness was defined as an individual's tendency to find meaning in stressful, challenging events, and engagement in meaningful work was defined as believing one's job on the mission plays an important role (job importance), identifying personal engagement in the mission (soldier engagement), and possessing a peacekeeper identity in relation to the peacekeeping operation (peacekeeper identity). Data was gathered from participants at mid-deployment (six months into their mission) and post-deployment (4-5 months following deployment). During mid-deployment, participants completed measures which assessed for hardiness and meaning in work, and during post-deployment, participants completed measures which assessed for perceived benefits and contextual experiences (i.e., experiences that lead a soldier to report meaning from the deployment experience. Examples included meeting local civilians, traveling outside the military base camp, and witnessing the destruction caused from war). The authors hypothesized that hardiness and meaning in work would predict perceived benefits from participating in a stressful event (i.e., peacekeeping operation), with hardiness influencing the meaning individuals attach to their work and that finding meaning in work would predict the benefits that soldiers derived from

their operation. Results of a structural equation model indicated that hardiness predicted meaningful work during mid-deployment, and that meaningful work at mid-deployment predicted benefits derived from the deployment experience, with 32% of the variance in benefits from deployment accounted for by the meaning soldiers attached to their experience in Bosnia. Results of this study also revealed that greater exposure to contextual experiences led to more perceived benefits. This study suggests that meaningful work experiences may impact the benefits U.S. soldiers derive from deployment when they return to civilian life. Given that meaning in life plays an influential role among the general veteran population, it would be useful to consider the role of meaning in life among college student veterans as well. The following section will review the construct of meaning in life in relation to college student veterans.

Meaning in life and college student veterans. One aspect of career development that has not been heavily researched is the role of meaning and purpose in a student veteran's life, and how this may impact the transition from military to student life and from student life to civilian life (Doenges, 2011). Although research has examined meaning in life among active duty military personnel (Bryan et al., 2013a; Bryan et al., 2013b), military veterans of various service eras who have been exposed to trauma (Owens et al., 2009), and Vietnam War veterans (Fontana & Rosenheck, 2005), only two studies have examined this variable in the college student veteran population (Doenges, 2011; Holland et al., 2014). This section will review these two studies (Doenges, 2011; Holland et al., 2014), as well as one other study (Kato, 2010), in which the findings from qualitative interviews resulted in a theme of student veterans finding meaning and purpose in life during the readjustment process from soldier to civilian.

Doenges (2011) utilized multiple regression analyses to examine the role of meaningful work and calling in the well-being of college student veterans (111 males and 29 females)

attending 12 different universities across the United States. A majority of participants in this study identified as Caucasian (91%) and non-Hispanic (90%). Participants also identified as Asian/Pacific Islander (2.2%), African American (2.2%), Native American (1.4%), and biracial/multiracial (2.9%). Well-being was measured using the following variables: life satisfaction, positive and negative affect, positive relationships, and meaning in life. The presence of calling was a significant positive predictor of the following well-being components: meaning in life, positive affect, positive relationships, and life satisfaction. In addition, search for calling was found to be a significant negative predictor of life satisfaction. Meaningful work was measured by the following three dimensions: work comprehension, greater good motivations, and work purpose. Work comprehension refers to how one's work contributes to a deeper understanding of self and the world. Greater good motivation refers to work that is meaningful through positively impacting others, and work purpose refers to finding a sense of purpose and satisfaction in one's work. Meaningful work, as measured by these dimensions, predicted various components of well-being. For instance, the dimension of greater good motivations was found to be a significant positive predictor of meaning in life and positive relationships. The work purpose dimension was a significant positive predictor of meaning in life and positive affect. Lastly, all three meaningful work dimensions (work comprehension, greater good motivations, and work purpose) significantly predicted the life satisfaction component of well-being. This information has implications for student veterans' mental health concerns given that a lack of purpose and meaning in one's work can impact an individual's transition experiences and overall well-being. Additionally, assisting student veterans in finding meaning and purpose in their work may significantly impact their career success (Doenges, 2011).

In the same study noted above, Doenges (2011) also used qualitative methods to examine the impact that military service experience has on college student veterans' college/academic experience, career goals, and interactions with others on campus. Through an online survey, participants (n = 137) were asked open-ended questions about how their military service impacted their college experience. Researchers utilized template analysis to code the data. Template analysis is a qualitative coding method in which researchers initially create themes they expect to arise from the data, and then revise these themes according to the data captured in participant responses. Participant themes which emerged from being asked how their military experience has impacted their college experience included personal and professional development (including character development, expansion of career options, appreciation of opportunities), social factors (including difficulty interacting and relating to their non-veteran college peers), and financial contributions (e.g., G.I. Bill benefits). Participants were also asked how their military service has influenced their life purpose and career goals. While some reported that military service provided clarity in career goals and assisted in expanding their career options, others found difficulty in finding purpose outside of the military. Lastly, participants were asked how their status as a military veteran influenced their interactions with others on the college campus. Results found that avoidance of interaction with college peers, hesitancy to divulge veteran status, and a developed sense of camaraderie with other veterans were themes indicated by participants from the open-ended survey questions.

According to Holland et al. (2014), deriving meaning from stressful life experiences is a salient issue for veterans transitioning to the college campus. In this study, researchers gathered data from 170 veterans attending the same community college and examined the associations between meaning made of stressful life experiences, suicidal risk, and life-threatening behaviors.

The majority of participants were male (87.4%) and 12.6% were female. Participant ethnicity included 28% Caucasian (n = 45), 12% African American (n = 19), 42% (n = 67) Latino or Hispanic, 15% Asian American (n = 24), and 4% other (n = 6). In this study, meaning made of stressful life events was assessed using two subscales from the Integration of Stressful Life Events Scale (ISLES), including the comprehensibility of the stressor and footing in the world. Comprehensibility of the stressor referred to an individual's ability to make sense of a stressful life event, and footing in the world referred to one's ability to maintain beliefs, goals, and values despite the occurrence of a stressful life event. Suicide risk was assessed using the Suicidal Behaviors Questionnaire – Revised (SBQ-R) and life-threatening behaviors were assessed by asking participants three questions related to the following high-risk behaviors: driving while under the influence of alcohol and/or drugs, not following advice recommended by healthcare providers, and engaging in self-mutilative behaviors. Results found statistically significant negative correlations between the two subscales of the ISLES (comprehensibility of the stressor and footing in the world) and suicide risk, as well as two life-threatening behaviors, including not following advice recommended by healthcare providers and engaging in self-mutilative behaviors. Using multiple regression analyses and controlling for several variables (including demographic variables such as age, ethnicity, gender, and years of education, religious faith, combat-related injury, combat exposure, depressive symptomology, and PTSD symptomology), results found that comprehensibility of the stressor was significantly associated with the following variables: suicide risk, driving while under the influence of alcohol or drugs, and engaging in self-mutilative behaviors, but footing in the world was not associated with any of the variables. This finding provides support for specific outcomes related to a student veterans' ability to make sense of a stressful life event. Essentially, participants in this study seemed to be

less likely a suicide risk, drive under the consumption of alcohol/drugs, and engage in self-mutilative behaviors when they were able to make sense of stressful life experiences (Holland et al., 2014). Limitations of this study included the use of self-report measures to assess life-threatening behaviors and the generalizability of findings to public 4-year universities and/or geographic locations in the United States.

Kato (2010) conducted interviews with 19 veterans attending a single community college (15 males and 4 females) to determine factors which influenced the adjustment process when transitioning from soldier to civilian. Participants had previously served in Iraq or Afghanistan within the past four months, and were no longer active duty status. There was also a range of participant ethnicities represented in this study including Caucasian (n = 5), Hispanic (n = 5), Asian/Pacific Islander (n = 4), African American (n = 2), and mixed (n = 3). To identify themes which emerged from participant interviews, researchers utilized constant comparative analysis, a method used in analyzing qualitative data which involves comparing newly collected interview data with previously collected data until themes emerge. Finding meaning and purpose in life was a critical theme that emerged when participants were asked about the readjustment process of returning to civilian life post-deployment. Participants reported feeling a sense of importance, respect, and gratification while serving in the military and being deployed to combat zones. They indicated feeling as though they were serving a greater good. Additionally, in transitioning to civilian life, some participants reported difficulty reestablishing their sense of importance and purpose, achieving a similar level of fulfillment and gratification that the military provided, and redefining feelings of pride, respect, and status acquired in the military. Some participants also expressed feeling lost, empty, and insignificant during the transition and adjustment process. They indicated searching for experiences which provided similar gratification that was

experienced in the military. The opportunity to reestablish their sense of purpose assisted in the readjustment process, as well as towards finding a new purpose in life. For instance, enrolling in higher education and having a specific goal to work towards helped some participants facilitate the readjustment process. As a result of reestablishing their sense of importance and purpose in life, some participants also reported decreased feelings of depression (Kato, 2010).

In general, some participants indicated that their military experience of being deployed to a combat zone was life-changing (Kato, 2010). Some individuals were separated from loved ones for extended periods of time, witnessed fatalities, were exposed to IED explosions, and observed first-hand the living conditions in Iraq and Afghanistan. In addition, these experiences allowed participants to appreciate other cultures, value the importance of relationships with family and friends, and cherish civilian life back home. These experiences also complicated the student veterans' difficulties in being able to find a new purpose in life upon returning to civilian life. Overall, the interview responses in this study demonstrated the important role of redefining meaning and purpose in the lives of student veterans readjusting to civilian life.

In summary, the studies reviewed suggest that there are several ways veterans have incorporated meaning in their lives as they transition from military to civilian life, including the pursuit of higher education and having a specific goal to work towards. In addition, meaning in life seems to serve as a protective factor for military individuals coping with mental health concerns such as depression, PTSD, and suicidal ideation. Furthermore, several studies demonstrated the significance of veterans engaging in meaningful work upon return from deployment, and only two studies have purposefully reviewed meaning in life among college student veterans. The following section will provide an overview of negative career thoughts and the impact these have on career problem solving and decision making.

Career Thoughts

Cognitions play a significant role in an individual's career decision-making process. Negative career thinking can impact an individual's affect and behavior, and influence an individual's problem-solving and decision-making skills (Kleiman et al., 2004; Sampson et al., 1996a; Sampson et al., 2004). Problematic beliefs may arise any time during the career decision-making process, and can potentially affect an individual's self-esteem, perceived self-efficacy, level of anxiety, and confidence in making decisions. In college student samples, negative career thoughts have been found to be negatively correlated with all Big Five personality factors (Bullock-Yowell, Andrews, & Buzzetta, 2011), career decision-making self-efficacy (Bullock-Yowell et al., 2011), and vocational identity (Sampson et al., 1996a), and positively correlated with goal instability (Bertoch, Lenz, Reardon, & Peterson, 2013), state and trait anxiety (Saunders et al., 2000), career indecision (Bullock-Yowell, Peterson, Reardon, Leierer, & Reed, 2011; Saunders et al., 2000), decision-making difficulties (Kleiman et al., 2004), and perfectionism (Osborn, 1999). This section will provide an overview of career thoughts and how they relate to various constructs including depression, decision-making difficulties, and psychological well-being.

Negative career thoughts have been examined in terms of their relation to various psychological and mental health constructs. Several researchers have found strong positive correlations between Career Thoughts Inventory (CTI) scores and the Beck Depression Inventory (BDI), indicating that negative career thinking is related to depression (Dagenhart, 2005; Dieringer, 2012; Saunders, 1998; Saunders et al., 2000; Walker & Peterson, 2012). Walker and Peterson (2012) investigated the relationship between negative career thoughts, career indecision, and depression in a sample of 158 undergraduate college students enrolled in a career

planning course. Results of this study found that both the CTI total score and all subscale scores were significantly positively correlated with depression, as measured by the Beck Depression Inventory-II (BDI-II). Results of a stepwise linear regression analysis found the CTI's DMC subscale to be the best predictor of depression, with high scores (T score of 68 or higher) indicating symptoms of mild depression. In addition, a significant positive correlation was found between career indecision, as measured by the Occupational Alternatives Questionnaire (OAQ), and dysfunctional career thoughts, indicating that individuals who experience difficulty in identifying occupational choices are more likely to experience greater dysfunctional career thoughts. In addition, Saunders et al. (2000) gathered data from 215 undergraduate college students and investigated the influence depression and negative career thoughts have on career indecision. A significant positive relationship was found between depression and negative career thinking, as well as between depression and career indecision. When six predictor variables were regressed upon career indecision (vocational identity, state and trait anxiety, locus of control, depression, and negative career thoughts) to determine significant predictions, negative career thoughts were found to contribute significant variation in the regression model.

Dieringer (2012) found results similar to the Walker and Peterson (2012) study when he administered the CTI, BDI-II, and the Beck Hopelessness Scale (BHS) to 147 undergraduate and graduate students seeking career counseling services at a university career center. Results found significant positive correlations between depression and the CTI total score (r = .48), as well as depression and all three subscale scores on the CTI including decision-making confusion (r = .43), commitment anxiety (r = .43), and external conflict (r = .39). Results also found significant positive correlations between hopelessness and all three subscale scores on the CTI. Stepwise linear regression analyses found two CTI subscales, including decision-making confusion

(DMC) and commitment anxiety (CA), significantly predicted scores on the BDI-II, and decision-making confusion (DMC) significantly predicted scores on the BHS. This study suggests that some aspects of negative career thinking can be used to predict depression and hopelessness in undergraduate and graduate students seeking career services.

Negative thoughts have been found to be related to career decision-making difficulties in several studies (Kleiman et al., 2004; Sampson et al., 1996a; Sampson et al., 2004). Kleiman et al. (2004) examined the relationship between negative career thoughts, measured by the Career Thoughts Inventory (CTI), and difficulties individuals encounter while making a career decision, measured by using the Career Decision-Making Difficulties Questionnaire (CDDQ) in a sample of 192 college students enrolled in an undergraduate career development course. Results revealed a significant positive correlation between dysfunctional career thoughts and difficulties individuals encounter during the decision-making process including lack of readiness to engage in decision making, insufficient amount of information about self, options, and/or the decision-making process, and unreliable information. In addition, participants were divided into two groups, those who had decided on a college major and those who had not yet decided on a college major. Researchers conducted a t-test to determine significant differences between these two groups on both the CDDQ and CTI total scores. Results found that individuals who had not yet decided on a college major demonstrated higher scores on the CDDQ and CTI, indicating higher negative career thinking and additional difficulties interfering with the decision-making process. This study also examined the relationship between negative career thoughts, decision-making difficulties, and an individual's degree of career decidedness, measured by the Occupational Alternatives Questionnaire (OAQ). Results found that individuals with a high degree of decidedness demonstrated lower levels of negative career thinking and career decision-

making difficulties. Overall, negative thinking during the decision-making process can significantly impact an individual's ability to make rational decisions.

Negative career thoughts have also been researched in relation to constructs of psychological well-being. Strauser, Lustig, and Ciftci (2008) surveyed a sample of 91 undergraduate college students to examine the impact of psychological well-being on vocational identity, negative career thoughts, and work personality. Negative career thoughts were measured using the Career Thoughts Inventory (CTI) total score, as well as three CTI subscales including decision-making confusion, commitment anxiety, and external conflict. Six dimensions of well-being were assessed using the Scales of Psychological Well-being. These included autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance. Lastly, work personality was measured using the Developmental Work Personality Scale, and vocational identity was measured using the vocational identity subscale of My Vocational Situation (MVS). Negative correlations were found between all six dimensions of psychological well-being and negative career thoughts, suggesting that higher levels of psychological well-being were associated with fewer negative career thoughts. Results of a multiple regression analysis found that 34% of the variance in dysfunctional career thoughts was accounted for by the six dimensions of psychological well-being. The results of a regression analysis using the CTI subscale scores revealed that the six dimensions of psychological well-being accounted for 25% of the variance in decision-making confusion, 40% of the variance in commitment anxiety, and 24% of the variance in external conflict. In other words, individuals with higher levels of psychological well-being reported fewer difficulties related to initiating and sustaining the career decision-making process, balancing self-perceptions with input received from others, and appropriately managing anxiety which accompanies the decision-making

process. The dimensions of psychological well-being accounted for 13% of the variance in vocational identity and 29% of the variance in work personality, suggesting that individuals with higher levels of psychological well-being report a clearer perception of talents, interests, goals, and personality, and are able to effectively manage and regulate the demands of a work environment. In addition, the purpose in life dimension demonstrated unique contributions to two career development variables in this study: commitment anxiety and vocational identity. In other words, individuals who indicated purpose and meaning in their lives demonstrated lower levels of commitment anxiety and higher levels of vocational identity. This study not only demonstrated the impact that psychological well-being can have on an individual's negative career thoughts, but it also highlights the relevance of purpose and meaning in relation to a college student's career development process.

In summary, negative career thoughts have been shown to impact the career planning and decision-making process. Mental health constructs, such as depression and hopelessness, directly correlate with negative career thoughts, highlighting the notion that career problems are interconnected with mental health concerns. Studies also demonstrate the impact that negative career thoughts have on career decision-making difficulties, as well as psychological well-being and meaning and purpose in one's life. It is important to know if similar findings apply to other college student populations, including veterans, as this can have implications for better understanding their career decision making. This study will further extend the research on negative career thoughts and examine its relationship with meaning in life. The following section will provide an overview of studies which assessed for career readiness factors, including negative career thoughts, within the veteran population.

Readiness factors and veterans. A key ingredient in delivering career services involves assessing for an individual's readiness to engage in the career decision-making process (Sampson, McClain, Musch, & Reardon, 2013; Sampson, Peterson, Reardon, & Lenz, 2000; Sampson et al., 2004). According to the cognitive information processing (CIP) theoretical framework, readiness is defined as an individual's capability to effectively engage in career problem solving and decision making, and also consider contextual factors which may be impacting the career development process including family members, social support, economic trends, and employing organizations (Sampson et al., 2004). A number of constructs have emerged in the empirical literature to explain why some individuals effectively make career decisions and others may experience difficulty. Examples of readiness constructs include career maturity (Crites, 1996), career adaptability (Savickas, 1994), vocational identity (Holland, 1997), and negative career thoughts (Sampson, Peterson, Lenz, Reardon, & Saunders, 1998). This section will provide an overview of two studies which examined readiness factors in veteran samples.

Only one study was found that assessed for negative career thoughts in a veteran population (Bullock et al., 2009). Bullock et al. (2009) conducted a quantitative study to better understand the career development concerns of 55 male U.S. veterans receiving career development services at a residential treatment center. Participant ethnicity included 53% African Americans, 38% Caucasian, and 9% who specified other or did not report. This quantitative study assessed for negative career thoughts in a sample of military veterans. Higher negative career thoughts were significantly related to lower job satisfaction and lower levels of the following personality traits: openness, extraversion, and emotional stability. Negative career thoughts was also found to be positively related to career worries, as measured by the Career

Worries scale of the Career Attitudes and Strategies Inventory (CASI). These results suggest that the presence of negative career thoughts can lead to a high level of worry or anxiety about one's career. Although this study did not include college student veterans, it provided data on the career concerns of military veterans, and provided insight into possible career concerns which may also exist among student veterans.

Another study conducted by Gaiter (2015) reviewed readiness factors in a sample of 264 service members transitioning from military to civilian life. Surveys were administered to military personnel attending a week-long Transition Assistance Program (TAP) workshop at a U.S. Navy military base. Participants consisted of 193 males and 67 females. Although the majority of participants identified as Caucasian/White (n = 169), several other ethnicities were represented including African American/Black (n = 51), American Indian/Alaska Native (n = 9), Asian (n = 4), Native Hawaiian/other Pacific (n = 1), and biracial/multiracial (n = 17). Gaiter (2015) investigated the relationship between career adaptability and two transition variables, including transition confidence and transition readiness. Career adaptability was measured utilizing the Career Futures Inventory –Revised (CFI-R). This measure consists of five subscales including career agency, negative career outlook, occupational awareness, support, and work-life balance. In this study, career adaptability referred to an individual's readiness to utilize and manage tasks, resources, and transitions related to constructing one's career. Career agency referred to an individual's ability to self-reflect and manage the career transition process. Negative career outlook referred to negative thoughts related to the career decision-making process. Occupational awareness referred to an individual's perceptions of job market, occupational, and industry trends and information. Support referred to the encouragement and support individuals receive from friends and family members in pursuing their career goals.

Lastly, work-life balance referred to the ability to manage and balance multiple life roles, including work and family responsibilities. Transition confidence and transition readiness were measured using the confidence and readiness subscales of the Career Transition Inventory (CTI). Transition confidence refers to an individual's belief about his/her ability to perform career-related tasks, and transition readiness refers to an individual's willingness to conduct tasks related to his/her career goals. Results found a significant negative relationship between transition confidence and career adaptability. In reviewing the CFI-R subscale scores, transition confidence was found to be significantly negatively correlated with career agency, occupational awareness, support, and work-life balance, and significantly positively correlated with negative career outlook. In addition, transition readiness was significantly, positively correlated with career adaptability. In regards to the CFI-R subscale scores, transition readiness was found to be significantly positively correlated with career agency, occupational awareness, support, and work-life balance, and negatively correlated with negative career outlook. In addition, participant demographic information was used to determine if significant differences existed on the confidence and readiness subscales of the Career Transition Inventory (CTI). Statistically significant results were found in transition confidence scores on the following demographic variables: education level, pay grade/military rank, and years of service. Post hoc analyses revealed that individuals who reported receiving the highest military pay grade, an education level of a Master's degree or higher, and had served 21 years or more had statistically significant lower career transition scores. Although statistically significant main effects were found in transition readiness scores for both race and marital status, results of post hoc analyses indicated that scores did not significantly differ from one another. Overall, transitioning service members in this sample identified low to medium transition confidence scores (mean = 30.10), medium to

high transition readiness scores (mean = 59.17), and medium to high career adaptability scores (as evidenced by the means for the career agency and support subscales). Low to medium scores were demonstrated on the negative career outlook, occupational awareness, and work-life balance subscales. These results suggest that military veterans may benefit from improving their readiness for utilizing and managing tasks, resources, and transitions related to their career. More specifically, enhancing their awareness and self-efficacy related to performing career-related tasks may prove to be beneficial.

According to Bullock et al. (2009), negative career thoughts are more likely to impact an individual's vocational behavior. Given the barriers veterans may encounter in their job search process including coping with physical and mental health concerns, translating military skills into civilian terminology, and experiencing gaps in their work history, the way that they perceive themselves and the world of work is likely to be affected. Although a number of studies have gathered data from diverse samples of student veterans and have inquired about participant gender and ethnicity in the data collection process (Britt et al., 2001; Britt et al., 2007; Bryan et al., 2013b; Bullock et al., 2009; Doenges, 2011; Holland et al., 2014; Rudd et al., 2011), minimal research has reviewed gender and ethnicity differences in veteran samples. Both gender and ethnicity appear to be useful demographic factors to consider in understanding and exploring a veteran's meaning in life. The following section will review studies that examined gender differences in veteran samples.

Gender Differences

Some studies have found differences between male and female veterans. Given that the number of women entering the military is increasing, as well as the number of women serving in combat roles (Baechtold & De Sawal, 2009), it is important to understand potential differences

between male and female veterans attending higher education institutions, and ways in which meaning in life might differ among these two groups. This section reviews studies that examined differences between male and female college student veterans, as well as male and female veterans within the general veteran population.

Baechtold and De Sawal (2009) indicated that females are beginning to comprise a larger proportion of the veteran population, and as a result, the number of female veterans transitioning to college campuses is growing as well. According to the National Center for Veterans Analysis and Statistics (2014b), female veterans consist of approximately 9% of the veteran population. The highest percentage of female veterans (30.1%) served post 9/11 (September 2001 to present). In comparison to their male counterparts, a higher percentage of female veterans are enrolled in college, have attained a Bachelor's degree or advanced degree (e.g., Master's, Ph.D., or J.D.), have a service-connected disability, live in poverty, and do not have health insurance coverage (National Center for Veterans Analysis and Statistics, 2014c).

In their article on the needs of female student veterans and based upon findings cited in two U.S. Department of Defense reports, Baechtold and De Sawal (2009) summarized two mental health concerns prevalent among female veterans including PTSD and military sexual trauma, and the impact these concerns have on military women including their willingness to seek treatment, difficulties adjusting upon return to civilian life (e.g., anger, anxiety, depression, substance use), and feeling lonely and misunderstood by family members and friends. Female veterans attached meaning to their college experiences much differently than the way males would. For example, female veterans were not as impacted by the day-to-day stressors experienced by traditional college student females. Given that many female veterans have been taught to portray strength in a male-dominant environment, and have been exposed to the

dangers of war and combat, it is often rare and uncommon for a female veteran to display weakness. Thus, some female veterans may face their own unique challenges in transitioning to the college campus (Baechtold & De Sawal, 2009). For instance, as military individuals transition from the role of service member to that of a civilian college student, they are in the process of redefining themselves as a civilian, a veteran, a male/female, and a student. Baechtold and De Sawal (2009) concluded that for females, this presents a unique, different experience, primarily because females experience more difficulty in defining their identities as *female veterans*. Additionally, female veterans are less likely to have role models of the same gender on college campuses (which is similar to their male-dominant military experiences as well) (Baechtold & De Sawal, 2009).

Ackerman et al. (2009) conducted a qualitative study by interviewing 25 college students (19 males and six females) from four different institutions who had served in Iraq and Afghanistan wars to determine the difficulties they encounter in transitioning to campus life. Although the focus of this study was on the transition veteran students make when they become (or return as) college students, the authors found that some female veterans faced different challenges compared to their male counterparts, specifically because of their gender and the complexities of having to earn acceptance from fellow male soldiers. Participants indicated concerns regarding feeling welcomed by fellow service members, having not only to earn respect for being a female service member, but also having to earn respect for their military occupational specialty, including being a construction worker, and learning to navigate social situations in which they were among a male-dominant culture.

Benda and House (2003) conducted a study with 225 male and 232 female veterans receiving services from a Veterans Affairs Medical Center (VAMC) to determine the impact of

gender on the diagnosis of Post-Traumatic Stress Disorder (PTSD). Results of this study demonstrated differences between male and female veterans diagnosed with PTSD, and found that female veterans were under-diagnosed with PTSD, in comparison to their male counterparts. As demonstrated by the Clinician-Administered PTSD Scale, 40.1% of female veterans (n = 93) met criteria for PTSD, but only 19.8% (n = 46) received a diagnosis of PTSD from VAMC staff psychiatrists. In regards to male veterans, the results found that 62.7% (n = 141) met criteria for PTSD on the Clinician-Administered PTSD Scale and 59.1% (n = 133) received a clinical diagnosis of PTSD from staff psychiatrists. This study also revealed gender differences in factors which predicted a diagnosis of PTSD with attachment to caregivers, self-esteem, and social support reducing the likelihood of PTSD in women, and stress, physical abuse, depression, fearfulness, and problems with family members and friends increasing the likelihood of PTSD in women. Combat stress, suicidal thoughts, alcohol and substance abuse, stress, and physical abuse were statistically significant predictors of PTSD in men, whereas resilience, self-efficacy, and self-esteem were significant predictors of reducing PTSD in men. Lastly, months in combat were a statistically significant predictor of PTSD for men, but not for women.

In their article which described the development of the Post-Deployment Readjustment Inventory (PDRI), Katz, Cojucar, Davenport, Pedram, and Lindl (2010) assessed for gender differences in a sample of 215 OIF/OEF veterans, which included 183 males and 32 females. Researchers were interested in determining if gender differences existed in the readjustment to civilian life, as measured by the Post-Deployment Readjustment Inventory (PDRI), exposure to war stressors and experiences, including military sexual trauma, witnessing others become injured or killed, and being injured themselves, and symptoms of psychological distress and PTSD, as measured by the Brief Symptom Inventory (BSI) and the PTSD Checklist – Military

Version. Results found significant gender differences in exposure to war stressors and events, with female veterans reporting higher rates of MST in comparison to their male counterparts, and male veterans reporting higher rates of witnessing others become injured or killed, in comparison to their female counterparts. A total of 35 veterans reported experiencing MST, 12.2% identifying as male (n = 22) and 40% identifying as female (n = 13). Individuals who reported MST also reported difficulties readjusting to civilian life including challenges related to their careers, intimate relationships, PTSD symptomology, and difficulties adjusting socially. Results of this study also found that 137 veterans reported witnessing others become injured or killed, including 67% males (n = 123) and 44% females (n = 14). Individuals who witnessed others become injured or killed also experienced difficulties readjusting to civilian life including reports of PTSD symptomology, difficulties adjusting socially, challenges related to their health, challenges in intimate relationships, and deployment concerns (e.g., worrying about others who are deployed, mourning the death of fellow service members).

In summary, the studies reviewed suggest that male and female veterans differ from one another in various ways including mental health concerns, service-connected disabilities, and exposure to war stressors and experiences such as MST and witnessing others become injured or killed. In addition, some research has shown that men are more likely to be diagnosed with PTSD than women, with substance abuse predicting PTSD in men and depression and fearfulness predicting PTSD in women (Benda & House, 2003). Given that each of these concerns will likely influence a veteran's meaning and purpose in life, it would be useful to explore differences in meaning in life scores among male and female student veterans, as this can impact their transition to the college campus, as well as their vocational achievement and career progression. Other demographic variables, such as ethnicity, may also be useful to explore as

well. The following section will provide an overview of ethnic differences which have been explored in veteran samples.

Race and Ethnicity Factors

According to the National Center for Veterans Analysis and Statistics (2014a), minority veterans encompass 21% of the veteran population including 11.1% Black, 6.2% Hispanic, 1.4% Asian (including Pacific Islanders and Native Hawaiians), 1.4% bi-racial or multi-racial, and 0.7% American Indian/American Native. Among the female veteran population, 33% of veterans consist of minorities. In comparison to Caucasian veterans between the ages of 17 and 34 (7%), there is a higher percentage of minority veterans in the 17-34 age range including 19% Hispanic, 17.3% bi-racial or multi-racial, 16.3% Asian, 11.5% Black, and 9.6% American Indian/American Native. Among the different service eras including World War II, Koran War, Vietnam era, and 9/11, statistics indicate that minority veterans have increased in numbers since 9/11. The highest percentages of minority veterans with a service-connected disability included Black (24.4%), biracial/multi-racial (22.8%), and American Indian/American Native (22%) veterans. In regards to poverty rates, the highest percentage of minority veterans included American Indian/American Native (13.9%), Black (12.4%), and biracial/multi-racial (11.6%) veterans (National Center for Veterans Analysis and Statistics, 2014a).

Spoont et al. (2009) explored the impact of demographic variables, including race and ethnicity, on a veteran's decision to participate in mental health treatment. Researchers utilized Veterans Affairs (VA) administrative databases to investigate a national sample of veterans who received a diagnosis of PTSD between the months of April 2004 and March 2005 (n = 20, 284). Participants identified their race as White (n = 8,874), Asian American (n = 161), African American (n = 3,089), Hawaiian/Pacific Islander (n = 177), Native American (n = 147),

multiracial (n = 56), and unknown (n = 7,781). In this study, the reference group consisted of veterans who identified as white (n = 8, 874). Outcome measures were investigated for a six month period following the diagnosis of PTSD, and included use of psychiatric medication, antidepressants, and counseling sessions. Information related to a minimal treatment trial was also explored. A minimal treatment trial consisted of veterans who received a minimum of eight counseling sessions, four 1-month supplies of psychiatric medications, and four 1-month supplies of antidepressant medication. Results found that race was a factor which contributed towards veterans seeking mental health treatment, but that ethnicity (e.g., Hispanic vs. non-Hispanic) was not a factor. More specifically, in comparison to White veterans, Native American veterans were less likely to receive psychiatric medications. African American and Hawaiian/Pacific Islanders were more likely than Whites to receive counseling services from VA treatment facilities, and Native American veterans were less likely than Whites to receive antidepressant medication. Overall, Native Americans were less likely to receive any medication in comparison to Whites. In regards to a minimal treatment trial, African American and multiracial veterans were more likely than Whites to receive a minimum of eight counseling sessions. In addition, African Americans and Hawaiian/Pacific Islanders were less likely to receive four 1-month supplies of psychiatric medications, whereas multiracial veterans were more likely to receive 1-month supplies of psychiatric medications. African Americans were less likely to receive four months of anti-depressants and multiracial veterans were more likely to receive four months of anti-depressants. Overall, African Americans were less likely to receive the minimal medication trial, and also less likely to receive any type of medication, whereas multiracial veterans were more likely to receive any type of medication. Results of this study suggest that race plays a significant role in whether or not a minority veteran utilizes mental

health treatment services offered through the VA, and that ethnicity did not play a substantial role. However, a limitation of this study was that the authors only reported statistical significance, and not the practical significance of their findings.

Dohrenwend, Turner, Turse, Lewis-Fernandez, and Yager (2008) investigated a subsample of 248 Vietnam veterans from the National Vietnam Veterans Readjustment Survey (NVVRS; n = 1200 veterans sampled) to determine reasons why prevalence rates of PTSD were higher for Black and Hispanic veterans in comparison to majority White veterans. Participants consisted of the following ethnicities: White (n = 94), Black (n = 70), and Hispanic (n = 84). Information was gathered on several variables including war-related PTSD (e.g., current, past, and incident PTSD), exposure to war zone stressors (e.g., exposure to combat, served in a military unit with high casualty rates), and factors which contributed to differences in PTSD scores including age, Armed Forces Qualification Test (AFQT) scores, educational level, discrimination, and exposure to adverse events upon return from service. War-related PTSD consisted of three types: current, past, and incident PTSD. Individuals with current PTSD consisted of veterans who met full diagnostic criteria for PTSD onset within six months of their clinical interviews. Individuals with past PTSD consisted of onsets which occurred six months prior to their clinical interviews. Incident PTSD consisted of a combination of current and past PTSD, and was considered to be war-related. Overall, the rates for current, past, and incident PTSD were higher for Black and Hispanic veterans in comparison to majority White veterans. In addition, when compared to White majority veterans, results found statistically significant differences in the rates of current PTSD and incident PTSD for Hispanics, as well as incident rates for Blacks. In reference to the severity of exposure to war zone stressors, Blacks and Hispanics experienced higher rates of exposure when compared to White veterans. Age,

education, and AFQT scores were related to differences in PTSD scores among Hispanics, when compared to majority White and Black veterans, whereas exposure to war zone stressors accounted for the differences in PTSD scores among Whites and Blacks. In addition, Black participants reported higher rates of prejudice, discrimination, and adverse reactions upon return from service, which could also explain differences in PTSD rates among Whites and Blacks.

Given that a growing number of minority veterans are likely transitioning to college campuses, it would be useful to understand if meaning in life scores differ among these groups. In comparison to White veterans, research indicates that some minority veterans experience higher rates of PTSD, are exposed to severe rates of war zone stressors (e.g., combat and serving in a military unit that has high casualty rates), and are less likely to utilize mental health services offered through the VA including counseling, psychiatric medication, and antidepressants. Given that the minority veteran population is expected to grow between the years 2013 and 2043 (National Center for Veterans Analysis and Statistics, 2014d), it is important to determine if there are differences between meaning in life scores among these group of veterans, as this can influence how mental health and career development professionals provide services to these individuals. The focus of this study is to explore the influence of career thoughts and depression on a student veteran's meaning in life. It would be important to further understand the theoretical basis related to the constructs in this study. The following section will provide an overview of three theories that were used to guide the current research study including cognitive information processing theory, cognitive behavioral theory, and logotherapy/existential theory.

Theoretical Underpinning

Very few studies involving college student veteran samples utilized theory to guide their research. In their review of the military career transition literature, Robertson, Miles, and Mallen

(2014) indicated the need for additional theory applications with the veteran population. In addition, a variety of publications discuss the use of cognitive information processing (CIP) theory (Sampson et al., 2004) with the veteran population (Bullock et al., 2009; Clemens & Milsom, 2008; Hayden & Buzzetta, 2014; Hayden et al., 2013; Hayden et al., 2014; Stein-McCormick et al., 2013). However, the majority of these resources focused on the general veteran population, as opposed to college student veterans, whose needs may be different. Additionally, to date, there were no empirical studies found that utilized CIP theory as a framework for research. Given this information, three theories were utilized to inform the current research study, cognitive information processing (CIP; Sampson et al., 2004), cognitive behavioral theory (CBT; Beck et al., 1979), and logotherapy and existential theory (Frankl, 1967a; Frankl 1967b).

Cognitive information processing (CIP) theory. Cognitive information processing (CIP) theory was designed to assist individuals in making informed decisions and improving their problem-solving and decision-making skills (Peterson, Sampson, Lenz, & Reardon, 2002; Sampson et al., 2004; Sampson, 2008). CIP theory is based on the assumption that career problem solving and decision making are influenced by an individual's affect and cognitions. In addition, CIP theory assists individuals in better understanding the content and process of career decision making, and aids individuals in enhancing their career problem-solving and decision-making skills (Sampson et al., 2004).

As noted, several publications have highlighted cognitive information processing (CIP) theory with the veteran population (Bullock et al., 2009; Clemens & Milsom, 2008; Hayden & Buzzetta, 2014; Hayden et al., 2013; Hayden et al., 2014; Stein-McCormick et al., 2013). Bullock et al. (2009) conducted a quantitative study to better understand the career development

concerns of 55 male U.S. veterans receiving career development services at a residential treatment center, and used the results of their study to provide suggestions of ways career practitioners can apply CIP theory to working with veteran populations. Clemens and Milsom (2008) reviewed key tenants of CIP theory (e.g., self-knowledge, options knowledge, and decision-making skills) and provided a case example which applied CIP theory to working with an enlisted soldier transitioning out of the military. Hayden and Buzzetta (2014) discussed ways practitioners could utilize CIP theory in assisting veterans with disabilities, and Hayden et al. (2013) suggested CIP theory as a foundation for working with veterans diagnosed with traumatic brain injury (TBI). Hayden et al. (2014) administered a career needs assessment survey to 92 student veterans attending a large southeastern university and proposed CIP theory as a useful intervention for working with college student veterans. Lastly, in their monograph related to veterans transitioning from military to civilian life, Stein-McCormick et al. (2013) devoted a chapter to applying CIP theory to veterans experiencing a career transition.

The CIP theory-based approach consists of two fundamental constructs: the pyramid of information processing domains and the CASVE cycle. The first construct, the pyramid of information processing, consists of three key domains: knowledge domains, decision-making skills domain, and executive processing domain, and is characterized by what individuals need to know in order to make an effective career decision. The foundation of the pyramid of information processing consists of the knowledge domain. This domain includes self-knowledge and options knowledge. According to Reardon, Lenz, Peterson, and Sampson (2012), self-knowledge is a fundamental ingredient of a person's career planning process and includes a self-assessment of one's values, interests, skills, and employment preferences. Options knowledge is the second fundamental ingredient of a person's career planning process (Reardon et al., 2012)

and consists of knowledge of options, including fields of study, occupations, and jobs, as well as a schema for organizing occupational information. The second domain, the decision-making skills domain, consists of a cycle, called the CASVE cycle, in which individuals incorporate self-knowledge and options knowledge to make an informed decision. The CASVE cycle can be used to assist individuals in progressing through career decisions. The content included in the decision-making skills domain influences the functioning within the knowledge domains. In other words, if individuals are quick to make a decision, then this will interfere with their ability to fully assess self-knowledge and occupational information. The last domain, the executive processing domain, consists of the metacognitive skills needed to make effective career decisions. Key metacognitions which comprise this domain consist of positive and/or negative self-talk, self-awareness of one's thoughts, and ability to monitor and control one's thoughts throughout the decision-making process. The content included in the executive processing domain influences the functioning within all of the other domains. For instance, metacognitions, whether positive or negative, influence the ability to progress in decision-making, evaluate values, interests, and skills, and research and comprehend occupational information.

CIP theory is related to this study through one of its key independent variables, career thoughts, which was measured utilizing the Career Thoughts Inventory (CTI; Sampson et al., 1996a). Negative career thoughts can exist across all domains of the pyramid of information processing, as well as across all phases of the CASVE cycle. Given this information, the CTI assesses for negative cognitions across eight content dimensions of CIP theory, including self-knowledge, options knowledge, executive processing, communication, analysis, synthesis, valuing, and execution (CASVE).

Cognitive behavioral theory. Cognitive behavioral therapy (CBT) includes a wide range of treatment strategies in which both the client and the therapist collaborate to identify and comprehend the associations between thoughts, feelings, and behaviors (Leichsenring, Hiller, Weissberg, & Leibing, 2006). CBT focuses on the here and now, and assists clients in becoming more aware of their dysfunctional thought patterns, and modifying and replacing maladaptive thoughts with reality-based interpretations (Beck et al., 1979; Leichsenring et al., 2006). Since cognitive-behavioral therapy employs both cognitive and behavioral strategies and interventions, it is useful to have an understanding of both of these techniques.

According to cognitive theory, the way individuals perceive and make sense of their experiences affects their emotional and behavioral responses. Individual thoughts and/or images, known as automatic thoughts, trigger intense emotional, physiological, and behavioral reactions, and are based upon schemas developed in early childhood. Schemas are beliefs that represent the self, world, and future. Cognitive therapy focuses primarily on identifying, challenging, and modifying dysfunctional schemas that are underlying automatic thoughts (Beck et al., 1979; Wenzel, Brown, & Karlin, 2011). Reducing dysfunctional schemas can positively impact individuals' affect, as well as enhance problem solving and decision-making skills. For instance, cognitive therapy assists individuals in correcting errors in their negative thinking, making it possible for individuals to reduce cognitive distortions such as dichotomous thinking patterns, magnification of negative thinking and minimization of positive thinking, overgeneralizing the current situation, and selective abstraction, which involves focusing on a single negative thought and/or experience, and attributing it to the current situation (Beck, 1995). Other types of cognitive distortions include catastrophizing, personalizing, labeling, and "should" and "must"

statements (Beck, 1995). Common techniques utilized in cognitive therapy include automatic thought records, thought sampling, and self-report questionnaires (Sharf, 2016).

In addition to employing cognitive techniques, behavioral strategies are introduced to assist individuals in managing their thoughts and emotions. Behavioral techniques entail small experiments in which individuals test the reality of their dysfunctional cognitions about themselves, the world, and/or the future (Beck et al., 1979). Another common behavioral technique includes creating a weekly activity schedule, and monitoring individual thoughts and feelings while engaging in specific behavioral tasks. Rating activities for mastery and/or pleasure, cognitive and/or behavioral rehearsal, assertiveness training, and role-playing are additional behavioral techniques which serve to identify and replace dysfunctional cognitions. Typically, behavioral techniques precede cognitive interventions, and are often introduced during the initial phases of therapy (Beck et al., 1979).

Cognitive-behavioral therapy has been effectively used as an evidenced based treatment for a variety of mental health concerns among military veterans including depression (Hyun, Chung, De Gagne, & Kang, 2014), suicidal ideation (Trockel, Karlin, Taylor, Brown, & Manber, 2015), post-traumatic stress disorder (Monson et al., 2006), substance use (Schonfeld et al., 2000), anxiety (Lang, 2003), and insomnia (Margolies, Rybarczyk, Vrana, Leszczyszyn, & Lynch, 2013). More recently, in response to a national initiative to implement evidence-based treatments for veterans and military service members across the Veterans Health Administration (VHA), Wenzel et al. (2011) developed a treatment protocol for the use and application of cognitive behavioral therapy for veterans and active duty service members who experience depression.

CBT theory is related to this study through one of its key independent variables, depression, which was measured utilizing the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R; Eaton et al., 2004). CBT theory asserts that individuals not only experience negative views of themselves, but they also experience negative views of the world and the future. CBT theory also focuses on the influence that cognitions have on an individual's affect and behavior, and that systematic thinking errors (such as dichotomous thinking or overgeneralization) can maintain negative cognitions. The CESD-R is a useful measure to assess for depressive symptomology caused by maladaptive, faulty cognitions.

Logotherapy and existentialism. According to Victor Frankl (1967a), logotherapy is a type of treatment which falls under the classification of existential psychology, and involves the process of helping individuals heal through meaning. Logotherapy views individuals' struggles as needing assistance in finding meaning in life and/or the meaning of their existence (Frankl, 1958). The role of the logotherapist is to assist individuals in fulfilling the meaning of their existence, as well as actualizing their values. Challenging individuals and helping them to evoke their *will to meaning* are essential ingredients of logotherapy (Frankl, 1961). The goal is not to help individuals search for the meaning of life in general, but to increase awareness of the concrete meaning of their existence (Frankl, 1986).

Existential theorists commonly utilize the phrase "being in the world," which indicates that a subjective person is not separated from the objective world (Frankl, 1967a). When using the term "subjective," Frankl was referring to "being in the world" and when referencing the term "objective," he was referring to "meaning in the world" (Frankl, 1986). Frankl (1986) asserted that it is important to complement the subjective and objective aspects of human existence and that this could be accomplished by understanding the concrete meaning of

challenging experiences and situations. In addition, Frankl (1961) indicated that mental health is related to the degree of tension which exists between what individuals have already accomplished and what they ought to achieve. In other words, individuals experience tension between the self (subjective) and the world (objective) (Frankl, 1986). This is known as *noo-dynamics* in logotherapy. Frankl (1961) stated that individuals do not need equilibrium or homeostasis. Rather, they need to strive and struggle for a goal worthy of living for.

Logotherapy is based on three core constructs: freedom of will, will to meaning, and meaning of life (1967b). Freedom of will refers to an individual's ability to choose his/her attitude, confront situations experienced, and reflect upon oneself (or even reject oneself) during the process. Individuals strive and struggle to find meaning, purpose, and value in their existence, a phrase Frankl coined as the "will to meaning." Frankl (1958) stated that it is human nature for individuals to search for a will to meaning, and that it is also possible to suffer from feeling meaninglessness in life. Frankl (1967b) distinguished between meaning orientation and meaning confrontation, and stated that meaning orientation was in reference to individuals being oriented toward meaning, and meaning confrontation occurred when individuals were confronted with meaning. When meaning orientation turns into meaning confrontation, this is when *freedom of will* turns into the *will to meaning* and the individual is now responsible for fulfilling the meaning of his/her existence (Frankl, 1967b). Lastly, Frankl (1967b) asserted that there are three different ways life can be made meaningful: 1) what individuals *give to life* (e.g., deed, creativity), 2) what individuals *take from life* (e.g., the ideals, meanings, and values derived from life experiences, encounters with nature, and encounters with others), and 3) the *stand individuals take* toward an outcome and/or situation they cannot change (e.g., incurable disease, pain, death, guilt). Frankl (1986) contended that individuals can find meaning in almost any

experience, even traumatic experiences. He referred to suffering, guilt, and death as the "tragic triad," and indicated that individuals who are able to interpret the meaning of their suffering are able to withstand the suffering. In addition, Frankl (1986) stated that despair does not stem from suffering. Rather, despair stems from doubt about whether or not suffering is meaningful.

The term 'existential' is commonly referred to three different ways: 1) an individual's existence and/or being in the world, 2) the meaning of existence and/or being in the world, and 3) striving to find meaning, purpose, and value in one's existence (also known as the will to meaning) (Frankl, 1961). The phrase *existential frustration* refers to the frustration experienced from not being able to find meaning in life, or the will to meaning, also referred to as the "lack of fulfillment of the will to meaning" (Frankl, 1958, p. 85). Existential frustration does not signify pathology. However, it can lead to pathology, a phrase Frankl referred to as *noogenic neuroses*. Many individuals also experience meaninglessness, emptiness, and a void in their lives and lack the fulfillment of feeling as though their life possesses meaning. This is what Frankl referred to as the *existential vacuum* (Frankl, 1961). Logotherapists assist individuals in filling their existential vacuum, as well as enabling their clients to achieve a meaningful and purposeful life (Frankl, 1961).

In conclusion, logotherapists assert that meaning can be found in any circumstance or life situation, including the loss of a loved one, trauma and/or suffering, and experiencing feelings of guilt (Frankl, 1967a). Given that meaning in life seems to serve as a protective factor for military individuals coping with mental health concerns such as depression, PTSD, and suicidal ideation, logotherapy and existentialism appear to be a useful lens to draw upon for the current study. In addition, given that college student veterans may experience various mental health concerns, including anxiety and depression, all of which can influence the career thoughts of this

population, both CBT and CIP appear to be useful theories to inform the current research study as well. The following section will provide a summary of the literature, as well as significant findings related to the current study's research.

Summary of Literature

In summary, statistics indicate an increase in the number of college student veterans transitioning from military service to attend college. In addition to encountering various challenges in their transition back to civilian life, including readjusting to civilian life, translating military skill sets into the civilian workforce, difficulty finding meaning and purpose outside of the military, and understanding the key benefits of the G.I. bill, mental health concerns may also be a challenge for veterans returning to college campuses (Barry et al., 2012a; DiRamio et al., 2008; Elliott et al., 2011; Felder, 2008; Ingala, 2011; Kay, 2011; Morreale, 2011; Rudd et al., 2011; Zinger & Cohen, 2010). Veterans coping with mental health concerns may experience additional difficulties navigating the transition from military to college. Specific mental health symptoms can interfere with a veteran's ability to engage in the classroom and succeed in higher education (Kay, 2011), and can also impact a student veterans' learning experiences (Green & Hayden, 2013). Research also indicates that mental health variables can negatively impact a college student's career decision-making and problem-solving skills (Dieringer, 2012; Saunders et al., 2000; Walker & Peterson, 2012).

This literature review has highlighted the fact that little is known about the career development concerns of college student veterans. While there has been research on the mental health concerns of student veterans, there is a minimal amount of literature which focuses on the career development needs of veterans, and specifically, college student veterans. This literature review found only two studies (Doenges, 2011; Gravley, 2012) which examined college student

veterans' career development needs. More specifically, the constructs of meaning in life and negative career thoughts have been minimally explored among this population. Knowing more about how student veterans experience meaning and purpose as they transition from military to student life can better assist both mental health and career development professionals in further understanding the transitional challenges and experiences they encounter, as well as factors to consider in providing counseling and career assistance. The results of this study also have potential implications for positively impacting the overall well-being of this population, given that previous research has found meaning and purpose to be negatively correlated with psychological constructs such as PTSD, depression, guilt, and suicidal ideation (Bryan et al., 2013b; Kleftaras & Psarra, 2012; Owens et al., 2009; Steger & Dik, 2009).

Research Questions & Analyses

The next chapter will review the methodology for the current study, as well as the research questions and hypotheses based on the literature including:

1) Do career thoughts, as measured by the *Career Thoughts Inventory (CTI)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)*, predict meaning in life, as measured by the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ)*, in a college student veteran sample? How much of the variance in meaning in life can be explained by career thoughts and depression?
2) What is the relationship between meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ)*, and depression, as measured by the *Center for Epidemiologic*

Studies Depression Scale – Revised (CESD-R) total score, in a college student veteran sample?

3) What is the relationship between career thoughts, as measured by the *Career Thoughts Inventory (CTI)* total score, and meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* in a college student veteran sample?
4) Are there significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity?

In response to the research questions above, and informed by the literature review in this chapter, the following hypotheses were proposed:

H1: Total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* will be significant positive predictors of scores on the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ).* There will be significant variance in the presence of meaning in life scores accounted for by total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R).*

H2: There will be a statistically significant negative relationship between the presence of meaning subscale and the CESD-R total score, and a statistically significant positive relationship between the search for meaning subscale and the CESD-R total score. College student veterans who indicate the presence of meaning in one's life will report lower CESD-R scores, and college student veterans who indicate a search for meaning in one's life will report higher CESD-R scores.

H3: There will be a statistically significant negative relationship between the presence of meaning subscale and the CTI total score, and a statistically significant positive relationship between the search for meaning subscale and the CTI total score. College student veterans who indicate the presence of meaning in one's life will have lower CTI total scores, and college student veterans who indicate a search for meaning in one's life will have higher CTI total scores.

H4: There will be no statistically significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity.

CHAPTER 3

METHODOLOGY

This chapter outlines the methodology and procedures that were utilized to answer the current study's research questions. The first section of this chapter includes the four main research questions, followed by the hypotheses informed by the literature review in chapter two. The participants section describes the anticipated sample size, eligibility criteria for study participants, and the population from which the sample was drawn. The measures section presents descriptions of the demographic form, as well as three assessments that were administered to participants. The procedures section describes the data collection process, and the research design section provides a description of the research design and approach, as well as the study's independent and dependent variables. The final section, data analysis, includes an explanation of the inferential statistics used to answer the study's research questions.

Research Questions

The following research questions and hypotheses were proposed as a result of the gaps in the literature, as well as the current study's purpose:

1) Do career thoughts, as measured by the *Career Thoughts Inventory (CTI)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)*, predict meaning in life, as measured by the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ)*, in a college student veteran sample? How much of the variance in meaning in life can be explained by career thoughts and depression?
2) What is the relationship between meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life*

Questionnaire (MLQ), and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* total score, in a college student veteran sample?

3) What is the relationship between career thoughts, as measured by the *Career Thoughts Inventory (CTI)* total score, and meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* in a college student veteran sample?
4) Are there significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity?

Hypotheses

In response to the research questions above, and informed by the literature review in chapter two, the following hypotheses were proposed:

H1: Total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* will be significant positive predictors of scores on the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ).* There will be significant variance in the presence of meaning in life scores accounted for by total scores on the *Career Thoughts Inventory (CTI)* and the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R).*

H2: There will be a statistically significant negative relationship between the presence of meaning subscale and the CESD-R total score, and a statistically significant positive relationship between the search for meaning subscale and the CESD-R total score. College student veterans who indicate the presence of meaning in one's life will report lower CESD-R scores, and college

student veterans who indicate a search for meaning in one's life will report higher CESD-R scores.

H3: There will be a statistically significant negative relationship between the presence of meaning subscale and the CTI total score, and a statistically significant positive relationship between the search for meaning subscale and the CTI total score. College student veterans who indicate the presence of meaning in one's life will have lower CTI total scores, and college student veterans who indicate a search for meaning in one's life will have higher CTI total scores.

H4: There will be no statistically significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity.

Participants

Power analysis. Several a priori power analyses using G*Power 3.1.7 (Faul, Erdfelder, Buchner, & Lang, 2009) were conducted to determine adequate sample size. Results of a linear multiple regression statistical analysis using a medium effect size (f^2 = .15), an alpha level of 0.05, a power value of .80, and two predictors indicated that a total sample size of 68 participants was necessary for this study. In addition, results of a one-tailed correlation analysis using a bivariate normal distribution, medium effect size (ρ = .3), alpha level of 0.05, and power value of .80 indicated a total sample size of 67 participants. Lastly, results of a one-way ANOVA analysis using a medium effect size (f^2 = .25), alpha level of 0.05, power value of .80, and two dependent variables indicated that a total sample size of 128 was necessary for the current study. In order to account for 5% incomplete or missing data, as well as the challenges associated with administering an online survey, the goal for data collection was set at a total sample size of 135.

Population. The goal of the current study was to gather data from a diverse sample of college student veterans across different geographic locations in the United States. It was estimated that the current study's sample would reflect the following demographic statistics of the college student veteran population. Estimates from the National Center for Education Statistics (NCES) suggest that 73% of military undergraduates are males and 27% are females. Earlier profiles of college student veterans found that 60% identified as Caucasian, 18% African American, 13% Hispanic, 3% Asian, and 6% as other (including American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander) (Radford, 2011; Radford & Wun, 2009). In addition, the National Center for Education Statistics (NCES; Radford, 2011) suggested that military graduate students include 65% males and 35% females. In regards to ethnicity, 60% of military graduate students identified as Caucasian, 20% African American, 12% Hispanic, 3% Asian, and 5% as other (including American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander).

Sample. The goal was to obtain a diverse sample of college student veterans attending higher education institutions across different geographic locations in the United States. To be eligible for participation in this study, participants must have been enrolled full-time or part-time in a higher education institution, and have served, or was currently serving, in one of the United States military branches. Participants enrolled in online higher education institutions were also eligible for this study.

Measures

The Demographic Form. The demographic form created for use in this study gathered information on participant personal characteristics, including age, gender, race/ethnicity, and marital relationship status, academic characteristics, including class level and major, and military

characteristics, including primary military branch of service, length of service, and number of deployments experienced. In addition, participant geographic location and type of institution (e.g., public, private, and/or community college) was also included on the demographic form.

The Meaning in Life Questionnaire. The Meaning in Life Questionnaire (MLQ; Steger et al., 2006) is a 10-item self-report measure which assesses two dimensions of meaning in life including the presence of meaning and the search for meaning. Items are measured using a 7-point Likert scale including (1) absolutely untrue, (2) mostly untrue, (3) somewhat untrue, (4) can't say true or false, (5) somewhat true, (6) mostly true, and (7) absolutely true. Each subscale consists of five items. The presence of meaning has been defined as the extent to which individuals feel their lives are significant, purposeful, and subjectively make sense to the person living it (King, Hicks, Krull, & Del Gaiso, 2006). Sample items from the presence of meaning subscale (MLQ-P) include "My life has a clear sense of purpose" and "I have a good sense of what makes my life meaningful." The search for meaning has been defined as the desire and effort for individuals to find meaning in life or deepen their sense of meaning, significance, and purpose in life (Steger, 2009). Sample items from the search for meaning subscale (MLQ-S) include "I am looking for something that makes my life feel meaningful" and "I am always looking to find my life's purpose." Scores on each of the MLQ subscales range from 5-35, with one item (item #9) reverse scored. The MLQ was not designed to produce a total score. Therefore, the subscales are analyzed separately. Higher scores on the MLQ presence subscale indicate greater meaning and purpose in one's life, and higher scores on the MLQ search for meaning subscales indicate greater exploration of meaning and purpose in one's life.

Steger et al. (2006) determined the factor structure of the MLQ by conducting an exploratory factor analysis (EFA) using principal axis factoring as the extraction method on a set

of 44 items. Participants included 154 undergraduate students enrolled in an introductory psychology course. Results of the principal axis factor analysis (PFA) revealed two factors (with eigenvalues of 11.63 and 8.07) which the authors labeled as the presence of meaning and the search for meaning. Items on these two factors were then obliquely rotated, and items which yielded a factor loading above .60 were retained and items which yielded a factor loading below .20 were omitted. A total of 17 items were analyzed using a confirmatory factor analysis (CFA) and assessing for a variety of fit indices including the goodness-of-fit index (GFI), normed fit index (NFI), Tucker-Lewis index (TFI), comparative fit index (CFI), and root-mean-square error of approximation (RMSEA). Results of the 17 item scale did not reveal acceptable model fit, and three items were removed. CFA analyses were completed on a 14 item scale, and items that had a factor loading lower than .60 were eliminated in order to improve model fit. Overall, the final 10-item scale with five items on each subscale was considered a good fit for the data because the GFI, NFI, TFI, CFI, and RMSEA index scores reflected particular aspects of good model fit. The presence of meaning and search for meaning were negatively correlated with one another (r = -.19). Lastly, additional factorial models were performed on the 10-item scale using two separate college student samples (n = 400 and n = 401). Results of these analyses supported a two-factor structure with fit indices specifying good model fit.

A high degree of internal consistency has been found for both MLQ subscales, including the presence of meaning subscale (α = .82 – .86) and the search for meaning subscale (α = .86 – .87) (Steger et al., 2006). Test-retest reliability for the MLQ over a one month interval was .70 for the presence of meaning subscale and .73 for the search for meaning subscale (Steger et al., 2006). Steger and Kashdan (2007) evaluated the longitudinal stability of the MLQ over a 13 month time period, and found evidence of moderate stability for both the MLQ-P (r = .50) and

MLQ-S subscales (r = .41), as well as high internal consistency coefficients (MLQ-P α = .83 – .88; MLQ-S α = .83 – .84). Furthermore, among samples of active duty military personnel, the MLQ presence of meaning subscale has yielded an internal consistency coefficient of .90 and the MLQ search for meaning subscale has demonstrated an alpha coefficient of .88 (Bryan et al., 2013a; Bryan et al., 2013b).

Steger et al. (2006) assessed the MLQ's convergent validity by examining the relationships between meaning in life and life satisfaction, dimensions of personality (including extraversion, openness, conscientiousness, agreeableness, and neuroticism), positive and negative affect, depression, and intrinsic religiosity. Results found the presence of meaning subscale to be significantly positively correlated with life satisfaction, positive emotions including love and joy, extraversion, agreeableness, and intrinsic religiosity. The presence of meaning subscale was significantly negatively correlated with negative emotions including fear, anger, shame, sadness, depression, and neuroticism. The search for meaning subscale was significantly positively correlated with the following variables: depression, neuroticism, and several negative emotions including sadness, shame, and fear. In addition, evidence of discriminant validity has been assessed by examining the relationships between meaning in life and values, social desirability, and extrinsic religiosity. Results found a non-significant relationship between meaning in life and extrinsic religiosity, social desirability, and the values ranking (Steger et al., 2006).

The Career Thoughts Inventory. The Career Thoughts Inventory (CTI; Sampson et al., 1996a) is a 48-item theory-based assessment used to measure negative thinking which may be impacting the career problem-solving and decision-making processes. Each item consists of a 4-point Likert scale ranging from strongly disagree to strongly agree (0 = strongly disagree, 1 =

disagree, 2 = agree, and 3 = strongly agree). The CTI yields both a total score, and scores on three different subscales including Decision Making Confusion (DMC), Commitment Anxiety (CA), and External Conflict (EC). The Decision Making Confusion subscale consists of 14 items which measure an individual's inability to begin or progress in the decision-making process. Examples of items on this subscale include "I get so depressed about choosing a field of study or occupation that I can't get started" and "Choosing an occupation is so complex, I'll never be able to make a good choice." The Commitment Anxiety subscale consists of ten items which measure an individual's inability to select, prioritize, and/or commit to a specific career choice due to accompanied anxiety associated with the outcome of decision making or with career indecision itself. Examples of items on this subscale include "I worry a great deal about choosing the right field of study or occupation" and "I'm afraid if I try out my chosen occupation, I won't be successful." The External Conflict subscale consists of five items which measure the influence that significant others may have on an individual's decision-making process. Examples of items on this subscale include "The views of important people in my life interfere with choosing a field of study or occupation" and "I need to choose a field of study or occupation that will please the important people in my life." Total scores on the CTI range from 0 – 144, with higher scores reflecting greater negative thinking. The CTI was normed with adults, college students, and high school students, and takes approximately 7-15 minutes to complete.

The CTI has demonstrated adequate internal consistency among adults, college students, high school students, and clients for both the total score (α = .93 – .97), and all three subscale scores (α = .74 – .94). Among a sample of college students (n = 595), the CTI total score demonstrated an alpha coefficient of .96. The test-retest reliability coefficient for a four-week

time interval in a sample of college students was .86, with subscale scores ranging from .74 – .82 (Sampson et al., 1996a).

Results of convergent validity studies indicate that the CTI significantly negatively correlates with a number of variables including vocational identity (r = -.69), certainty of career choice (r = -.61), comfort with career choice (r = -.58), career decidedness (r = -.48), and decisiveness (r = -.57), and significantly positively correlates with career indecision (r = .70), and general personality characteristics including neuroticism (r = .51), anxiety (r = .32), depression (r = .51), impulsiveness (r = .27), and vulnerability (r = .54) (Sampson et al., 1996a).

Evidence of criterion validity has been demonstrated among college students seeking career services (n = 199) and those not seeking career services (n = 149). Results of a MANOVA analysis revealed significant differences between these two groups on both the CTI total score and all three subscale scores. Post-hoc comparisons indicated that the mean scores were higher for college students seeking career services (M = 59.45; SD = 18.07), in comparison to those students who were not seeking career services (M = 50.11; SD = 20.26) (Sampson et al., 1996a). All 48 items on the CTI correspond with key tenants of cognitive information processing (CIP) theory, including self-knowledge, options knowledge, communication, analysis, synthesis, valuing, execution, and executive processing (Sampson et al., 1996a).

The Center for Epidemiologic Studies Depression Scale – Revised. The Center for Epidemiologic Studies Depression Scale – Revised (CESD-R; Eaton et al., 2004) is a self-administered instrument which contains 20 items assessing the severity of depression experienced by individuals. The CESD-R includes items which are aligned with the depression criteria in the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV). The CESD-R assesses for depression across nine different domains including sadness, loss of interest,

appetite, sleep, ability to concentrate, feelings of guilt, tiredness, agitation, and suicidal ideation. Using the following response options, individuals are asked to rate how often they have felt a particular way in the past week: not at all or less than one day (0), 1-2 days (1), 3-4 days (2), 5-7 days (3), and nearly every day for two weeks (4). When calculating the total score for the CESD-R, the score for the two week category is converted to a three. Therefore, total scores range from zero to 60, with higher scores indicating greater depressive symptomology. Scores of 16 or higher are indicative of probable depressive symptomology (Eaton, 2001). Sample items on the CESD-R include "I had a lot of trouble getting to sleep," "I lost interest in my usual activities," and "Nothing made me happy."

The CESD-R is a revision of the original CESD instrument (Radloff, 1977) that was developed in 1977 at the Center for Epidemiologic Studies, which is a division of the National Institute of Mental Health. The CESD-R was created in 2004 to align more with current criteria for a diagnosis of major depression, and to add an additional response option ("nearly every day for two weeks"). A high degree of internal consistency has been found for the CESD-R, with alpha coefficients ranging from .92 to .96 (Eaton et al., 2004). In addition, Eaton et al. (2004) assessed the CESD-R's convergent validity by examining its relationship with the original CESD measure among three different samples including parents of teenage children (n = 70), nurse assistants (n = 868), and individuals who consented to participate in an online version of the CESD and CESD-R (n = 63). Results found high correlations between the original CESD and the revised CESD with Pearson coefficients ranging from .88 to .93.

Van Dam and Earleywine (2011) assessed the CESD-R's convergent and discriminant validity by examining the relationships between depression and positive and negative affect, state-trait anxiety, and schizotypal personality disorder. Data was gathered from two samples,

including 7,389 community members (sample 1) and 245 college students (sample 2). Participants in the first sample completed measures of depression, state-trait anxiety, and schizotypal personality disorder, whereas participants in the second sample completed measures of depression, state-trait anxiety, schizotypal personality disorder, and positive and negative affect. Results from the first sample of community members found positive correlations between depression and state-trait anxiety ($r = 0.74$), and depression and schizotypal personality disorder ($r = 0.45$). Results from the second sample of college students found positive correlations between depression and state-trait anxiety ($r = 0.65$), schizotypal personality disorder ($r = 0.43$), and negative affect ($r = 0.58$). Also among the college student sample, a negative correlation was found between depression and positive affect ($r = -0.26$). Lastly, a high degree of internal consistency was found for both samples (sample 1 = 0.92; sample 2 = 0.93). In addition, Gloria, Castellanos, Kanagui-Muñoz, and Rico (2012) examined the convergent validity of the BDI-II and the original CESD scale utilizing a sample of 203 Latino/a undergraduate students, and results found a significant, positive correlation between these two measures ($r = .75$).

Eaton et al. (2004) indicated that the original CESD measure yielded a PubMed database search of 890 articles. A recent search on the ProQuest dissertation and theses database yielded a number of studies which have administered the CESD to a variety of diverse samples including lesbian, gay and bisexual (LGB) individuals (Birnholz, 2014), adults with physical disabilities (Pardini-Coyle, 1991), Native Americans living on and off a reservation (Byington, 2001), and women living with cancer (Hoffman, 2003).

Procedures

This study received approval from the University Human Subjects Review Committee prior to the administration of questionnaires. Qualtrics, an online service provider, was used to

create and disseminate the informed consent, demographic questionnaire, three assessments, and referral resources to interested participants. The Qualtrics survey was password protected in order to ensure that the assessments were kept secure. Participants were not permitted to proceed with the survey if they specified non-consent to participate or indicated that they had not currently or previously served in the U.S. military. All three assessments were administered in randomized order, and a referral resources sheet was included as a header on each page of the survey. Data was collected over a two month time period.

Participants were primarily recruited through distribution of emails sent to college and university Veterans Center Directors and/or Coordinators requesting their permission to distribute the study's online link to veterans attending their institutions. This email included a brief overview of the study's purpose, eligibility criteria for participating in the study, contact information for the primary researcher and faculty advisor, and information for accessing the electronic hyperlink. A random numbers table was utilized to select 60 universities and 30 community colleges to send email invitations (Fricker, 2008), with the intention of reaching a sufficient number of participants by beginning with 90 institutions. This sampling method was selected to minimize the possibility of selection bias. A total of 814 universities and community colleges from the Student Veterans of America (SVA) association online directory were organized into two Excel spreadsheets, one for universities and one for community colleges. All 814 universities and community colleges were categorized according to their geographic location in the United States. Six geographic locations were included on the spreadsheets including northeast, midwest, southeast, southwest, south, and west. Using a random numbers table, the researcher arbitrarily selected a starting point, read down the column from the arbitrary starting point, and accepted integers in the range. If the number from the table was outside the range,

then it was skipped. Ten universities and five community colleges were selected from six geographic regions of the United States, totaling 60 universities and 30 community colleges. Ninety email invitations were sent to the Veterans Director and/or Coordinator of each institution. In addition to sending 90 emails, four other institutions were targeted due to their interest in the research and the number of veterans attending these institutions. Follow-up emails were sent to Veterans Directors and/or Coordinators three and four weeks following initial email requests. A total of 49 follow-up emails were sent to universities, and 25 were sent to community colleges. A total of 32 Veterans Directors and/or Coordinators responded to the researcher's email, and 12 individuals indicated that they had forwarded the survey request to student veterans at their institutions. A portion of respondents indicated that they had forwarded the electronic survey to their Student Veteran Association chapter President and/or presented the research study at their chapter meeting (n = 5). In addition to sending email requests to 90 universities and community colleges, the researcher utilized Facebook to recruit participants, and posted brief invitations to complete the survey on student veteran association pages (n = 45).

Prospective participants were told that the researcher was looking at personal characteristics related to college student veterans' career development, and they were asked to complete an informed consent, demographic form, and three assessments. If interested in participating, participants were directed to an electronic hyperlink, where they were invited to read the consent information prior to completing the demographic form and assessments. The informed consent reviewed the content of the study, provided an explanation of the voluntary nature of the survey, and reviewed the limits to confidentiality. Participants were asked to click on a box indicating their consent to participate. It was anticipated that participants took approximately 10-15 minutes to complete all questionnaires included in the research. Participants

were informed of their ability to discontinue the survey at any time and a list of referral resources was made available to all participants through the survey system.

Research Design and Variables

The present study utilized a passive observational research design (Shadish et al., 2002) which included career thoughts and depression as the two continuous independent variables, also known as the predictor variables, and meaning in life as the continuous dependent variable, also known as the criterion variable. A passive observational research design examines the relationship between variables as they occur in natural settings, and does not manipulate any of the variables being studied (Shadish et al., 2002). Career thoughts was operationalized using the total score on the Career Thoughts Inventory (CTI; Sampson et al., 1996a), and depression was measured using the total score on the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R; Eaton et al., 2004). Meaning in life was assessed using the presence of meaning and search for meaning subscale scores on the Meaning in Life Questionnaire (MLQ; Steger et al., 2006). Lastly, two demographic variables, including gender and ethnicity, were used as independent variables to examine differences in meaning in life scores on the presence of meaning and search for meaning subscales.

Data Analysis

To answer the first research question, a linear multiple regression analysis was used to determine if the total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) were significant positive predictors of scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ). In addition, Pearson correlation analyses were utilized to answer the second and third research questions. The subscale scores on the meaning in life measure were used, in addition to

the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) total scores. Lastly, ANOVA analyses were used to answer the fourth research question. Prior to conducting any statistical analyses for this study, tests were performed to assure there were no violations in assumptions.

CHAPTER 4

RESULTS

The current study sought to understand factors which influence meaning in life in student veterans who have transitioned from military to civilian life, and then into student life as well. A total of 174 participants were surveyed using four instruments including a demographic questionnaire, the Meaning in Life Questionnaire (MLQ; Steger et al., 2006), the Career Thoughts Inventory (CTI; Sampson et al., 1996a), and the Center for Epidemiologic Studies Depression Scale - Revised (CESD-R; Eaton et al., 2004).

The purpose of this chapter is to present the results of the statistical analyses that were conducted to answer the study's research questions. The first section describes the descriptive statistics for each of the measures included in the survey. This section also includes an overview of the preliminary analyses conducted to assure there were no violations in the assumptions underlying the statistical analysis. The second section provides demographic information on the student veteran participants including personal, academic, and military characteristics. The following section presents the results of the inferential statistics used to answer the current study's research questions. The concluding section includes the results of additional analyses not included in the research questions and hypotheses.

Preliminary Analyses

A total of 174 participants initially responded to the online survey, and 39 (22%) of the total participants were excluded due to missing and/or incomplete data, non-consenting to participate, and/or not meeting the eligibility criteria for participation, which included current enrollment in a higher education institution (e.g., full-time, part-time, or online), as well as current or previous service in the United States military. Therefore, preliminary analyses were

completed using a total of 135 participants. Table 1 includes the means, standard deviations, range of participant scores, and Cronbach's Alpha reliability coefficients associated with each of the instruments used in this study. Overall, student veterans in this study reported low levels of depressive symptoms and negative thoughts, as well as high scores on the presence of meaning and search for meaning subscales.

Table 1

Means, Standard Deviations, and Reliability for All Instruments

Variable/Measure	Mean	SD	Min.	Max.	α
Meaning in Life Questionnaire (MLQ)					
The Presence of Meaning Subscale	26.22	6.86	5	35	.93
The Search for Meaning Subscale	23.46	7.98	5	35	.91
Career Thoughts Inventory (CTI) Total Score	32.93	24.70	0	103	.97
Center for Epidemiologic Studies Depression Scale - Revised (CESD-R)	14.23	12.71	0	58	.94

Preliminary analyses were performed using 135 participants to ensure no violation of normality, linearity, and homoscedasticity assumptions for a regression analysis. To check if there was any potential threat to these assumptions, several investigations were conducted including outlier analysis using standardized residuals, visual inspection of the scatter plots, quantile-by-quantile (Q-Q) plots, and raw score distribution for each variable. The standardized residuals with three standard deviations above or below the mean were flagged as potential outliers (Tabachnick & Fidell, 2007) and three cases were consequently removed from the data. The final number of participants was reduced to 132, and normality, linearity, and homoscedasticity assumptions appeared to be satisfactory. The magnitude of the correlation

coefficient between the independent variables in the current study (r = .45) suggested that there was no potential threat to the multicollinearity between the independent variables used in the model. In addition, the magnitudes of the Tolerance indicator (.80) and Variance Inflation Factor (1.25) also indicated that no multicollinearity existed between the predictor variables.

During the preliminary data analysis (n = 135), the researcher also inspected participant responses to the "race/ethnicity" category, and observed that participants predominantly identified as Caucasian (66.7%), and 30.4% identified as ethnic minorities including Black (13.3%), Hispanic (7.4%), Asian (2.2%), Hawaiian (0.7%), Biracial (5.9%), and Other (0.7%). Four participants (3.0%) identified that they preferred not to respond to this question. For the purposes of answering research question #4, the researcher collapsed the ethnicity category into "Caucasian" versus "non-Caucasian."

Description of Participants

A total of 174 participants initially responded to the online survey. After excluding missing and/or incomplete data (n = 39), as well as three outlier cases during preliminary analyses, the total sample size for the current study was 132 participants. The mean age of participants was 35, with ages ranging from 19 to 64. Males comprised the majority of participants (66.7%), in comparison to females (32.6%) and one participant who selected "Other" (0.8%). Participants were predominantly Caucasian (66.7%), 30.3% identified as ethnic minorities, and 3% chose not to respond to this question. Regarding marital status, 67 participants reported being married (50.8%), 48 participants (36.4%) indicated that they were single, ten were divorced (7.6%), four were separated (3.0%), and three participants chose not to respond to this question (2.3%). Regarding the geographic location of participant's college and/or institution, the majority of participants reported attending college in the southeast

(75.8%). Nine participants reported attending college in the west (6.8%), eight were in the south (6.1%), six were in the southwest (4.5%), five were in the midwest (3.8%), three were in the northeast (2.3%), and one individual reported "not applicable/online institution" (0.8%).

In regards to participant academic characteristics, more than half of participants attended a public four year institution (61.4%), 24.2% attended a community college, 9.8% attended a private college and/or university, and six individuals reported enrollment in an online institution (4.5%). Participants ranged in classification across undergraduate and graduate levels including freshman (9.8%), sophomore (15.2%), junior (15.9%), senior (28%), Master's level graduate student (20.5%), and doctoral level graduate student (10.6%).

Regarding military characteristics, a range of military branches were represented including Army (35.6%), Air Force (17.4%), Marine Corps (15.9%), Navy (29.5%), and Coast Guard (1.5%). Approximately 2.3% of participants specified serving in the military less than one year, 9.1% served between one and three years, 25.8% served between three and five years, 25% served between five and ten years, 13.6% served between 10 and 15 years, and 24.2% served 15 years or more. Participants were also asked to indicate the total number of times they were deployed. Responses indicated that 30.3% of participants were never deployed, 14.4% deployed once, 22% deployed twice, 5.3% deployed three times, 9.1% deployed four times, 6.1% deployed five times, and 12.9% deployed six or more times. More than half of participants (55.3%) indicated deployment to a combat zone, 25% specified not being deployed to a combat zone, and 19.7% indicated "not applicable" to this question. The participants (n = 73) that reported deployment to a combat zone were also asked to specify which combat zone they were deployed. Many participants specified more than one combat zone to which they had been deployed. Participants primarily indicated deployment to a Middle Eastern combat zone (n = 68)

including Iraq, Afghanistan, Yemen, the Persian Gulf, the Red Sea, and the Arabian Gulf. In addition, three participants indicated deployment to Europe (e.g., Bosnia, Kosovo, the Adriatic Sea), two to Africa (e.g, Somalia), one to Asia, and two individuals indicated "not specified" and/or "various regions." Participant demographic information can be found in table 2.

Radford (2011) and Radford and Wun (2009) using data from the National Center for Education Statistics (NCES) reported that 73% of military undergraduates identified as male and 27% identified as female. Regarding ethnicity, 60% of military undergraduates identified as Caucasian, 18% African American, 13% Hispanic, 3% Asian, and 6% as other (including American Indian, Alaskan Native, Native Hawaiian, and Pacific Islander). When comparing the percentages from the current study's sample to the college student veteran population from the NCES, the results are closely aligned. For instance, in the current study, 66.7% of participants identified as male, and 66.7% identified as Caucasian. When comparing this to the population's statistics, the differences remain very small. Based on this information, it appears as though the data collected from participants in this study may reflect the gender and ethnic diversity which exists among the student veteran population. Four research questions guided this study, and the following section discusses the findings related to each question.

Primary Analyses

Research Question #1: Do career thoughts, as measured by the *Career Thoughts Inventory (CTI)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)*, predict meaning in life, as measured by the presence of meaning subscale of the *Meaning in Life Questionnaire (MLQ)*, in a college student veteran sample? How much of the variance in meaning in life can be explained by career thoughts and depression?

Table 2

Participant Demographic Characteristics (n=132)

Variable	Percentage	Frequency
Gender		
Male	66.7%	88
Female	32.6%	43
Other	0.8%	1
Race/Ethnicity		
White/Caucasian	66.7%	88
Non-White/Non-Caucasian	30.3%	40
Prefer Not to Respond	3.0%	4
Classification		
Freshman	9.8%	13
Sophomore	15.2%	20
Junior	15.9%	21
Senior	28.0%	37
Graduate (Master's level)	20.5%	27
Graduate (Doctoral level)	10.6%	14
Military Branch		
Army	35.6%	47
Air Force	17.4%	23
Marine Corps	15.9%	21
Navy	29.5%	39
Coast Guard	1.5%	2
Deployment to Combat Zone		
Yes	55.3%	73
No	25.0%	33
Not Applicable	19.7%	26

H1: Total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) will be significant positive predictors of scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ). There will be significant variance in the presence of meaning in life scores accounted for by total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R).

The first research question sought to determine if career thoughts and depression predicted meaning in life in a college student veteran sample. To answer this question, a linear regression model with simultaneous entry was conducted. Meaning in life, as measured by the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ), was regressed upon career thoughts and depression, as measured by the total scores on the Career Thoughts Inventory (CTI) and The Center for Epidemiologic Studies Depression Scale – Revised (CESD-R). The results of the multiple regression analysis revealed that both career thoughts and depression were statistically significant predictors of the presence of meaning in one's life (F = 55.22, $p < .001$). With a significant standardized regression coefficient of -.51 (t = -6.95, $p <$ .001), participant scores on the Career Thoughts Inventory (CTI) emerged as the strongest predictor of participant scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ), suggesting that individuals who reported greater negative thoughts were more likely to experience lower levels of meaning and purpose in one's life. The standardized beta coefficient for scores on the CTI was -.51, suggesting that for every one unit increase in career thoughts scores, the presence of meaning in life scores would decrease by .51 standard deviation units, by controlling for the other predictor (depression) in the regression model.

A second strong predictor of participant scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ) was depression (t = -3.84, p < .001), suggesting that individuals who reported greater depressive symptomology were more likely to report lower levels of meaning and purpose in one's life. The standardized regression coefficient for scores on the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) was -.28, suggesting that for every one unit increase in depression scores, the presence of meaning in life scores would decrease by .28 standard deviation units, by controlling for the other predictor (career thoughts) in the regression model.

Lastly, 46% of the variance in the presence of meaning in life scores was accounted for by total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R), suggesting that both career thoughts and depression accounted for a moderate portion of the variance in the presence of meaning in college student veterans' lives in the current study. To determine the unique variances of each predictor variable, a hierarchical multiple regression was conducted, with career thoughts and depression entered into the model step by step. Results revealed that participant scores on the Career Thoughts Inventory (CTI) explained 40% of the variance in the presence of meaning in life scores (F (1, 130) = 86.50, p < .001), while scores on the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) explained 6.2% of the variance in the presence of meaning in life scores (F (1, 129) = 14.78, p < .001). The results of the hierarchical multiple regression can be found in Table 3. Furthermore, a test of dependent correlations (Lee & Preacher, 2013; Steiger, 1980) was conducted to determine the statistical significance between two dependent correlations which shared the same variable. Results of a one-tailed z-test of dependent correlations revealed that the test of the difference between correlations was statistically significant (p = 0.03). This finding

indicated that the magnitude of the correlation between meaning in life and career thoughts was significantly stronger than the correlation between meaning in life and depression.

Table 3

Hierarchical Regression Analysis for Variables Predicting Meaning in Life

Variable	*B*	*SE B*	β	F	df	ΔR^2
Step 1				86.50	130	.400*
Career Thoughts	-.163	.018	-.632*			
Step 2				14.78	129	.062*
Career Thoughts	-.130	.019	-.505*			
Depression	-.140	.036	-.279*			

Note. $p < .001$*

Research Question #2: What is the relationship between meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ)*, and depression, as measured by the *Center for Epidemiologic Studies Depression Scale – Revised (CESD-R)* total score, in a college student veteran sample?

H2: There will be a statistically significant negative relationship between the presence of meaning subscale and the CESD-R total score, and a statistically significant positive relationship between the search for meaning subscale and the CESD-R total score.

The relationship between meaning in life constructs, as measured by the presence of meaning and search for meaning subscales of the Meaning in Life Questionnaire (MLQ), and depression, as measured by the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) total score, was investigated using Pearson product-moment correlation coefficients.

Findings demonstrated that the correlation coefficients were statistically significant at alpha level of .01. There was a strong negative correlation between the presence of meaning and depression (r = -.51). High reports of meaning and purpose in one's life were associated with lower levels of depressive symptomology. The results also indicated that a moderate positive correlation existed between the search for meaning and depression (r = .30), suggesting that greater exploration of meaning and purpose in one's life was associated with higher levels of depression. Please refer to table 4 for the correlation coefficients among all variables in this study.

Research Question #3: What is the relationship between career thoughts, as measured by the *Career Thoughts Inventory (CTI)* total score, and meaning in life constructs, including the presence of meaning and the search for meaning, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* in a college student veteran sample?

H3: There will be a statistically significant negative relationship between the presence of meaning subscale and the CTI total score, and a statistically significant positive relationship between the search for meaning subscale and the CTI total score.

Pearson product-moment correlation coefficients were calculated to investigate the degree of association between meaning in life constructs, including the presence of meaning and search for meaning, as measured by the subscales of the Meaning in Life Questionnaire (MLQ), and career thoughts, as measured by the Career Thoughts Inventory (CTI) total score. Results demonstrated that the correlation coefficients were statistically significant at alpha level of .01. There was a strong negative relationship between the presence of meaning and career thoughts (r = -.63), suggesting that higher levels of meaning and purpose in one's life were associated with lower levels of negative thinking. Results also indicated that a moderate positive relationship

exists between the search for meaning and career thoughts (r = .36), suggesting that greater exploration of meaning and purpose in one's life was associated with higher levels of negative thinking. Please refer to table 4 for the correlation coefficients among all variables in this study.

Table 4

Pearson Product-Moment Correlations Between Measures (n = 132)

Variable/Measure		1	2	3	4
	Meaning in Life Questionnaire (MLQ)				
1	The Presence of Meaning Subscale	1			
2	The Search for Meaning Subscale	-.292*	1		
3	Career Thoughts Inventory (CTI) Total Score	-.632*	.361*	1	
4	Center for Epidemiologic Studies Depression Scale - Revised (CESD-R)	-.509*	.295*	.456*	1

Note. $p < .01$*

Research Question #4: Are there significant differences in meaning in life scores, as measured by the subscales of the *Meaning in Life Questionnaire (MLQ),* on the following demographic characteristics of college student veterans: gender and ethnicity?

H4: There will be no statistically significant differences in meaning in life scores, as measured by the subscales of the Meaning in Life Questionnaire (MLQ), on the following demographic characteristics of college student veterans: gender and ethnicity.

Prior to conducting statistical analyses, the researcher removed participants who selected the "Other" or "Prefer not to respond" options to the gender and/or ethnicity questions on the demographic questionnaire (n = 5). This allowed the researcher to determine if there were any significant differences between males and females, as well as Caucasians and non-Caucasians on the subscales of the Meaning in Life Questionnaire (MLQ). Therefore, a total of 127 participants were utilized to answer this research question, with 68.5% identifying as Caucasian (n = 87) and

31.5% identifying as non-Caucasian (n = 40), as well as 66.1% identifying as male (n = 84) and 33.9% identifying as female (n = 43).

Analysis of Variance (ANOVA) procedure was utilized in SPSS Version 22.0 (IBM Corp., 2013) to explore the effect of gender, ethnicity, and their interaction (gender * ethnicity) on the presence of meaning in life scores. The ANOVA results revealed that the interaction effect between gender and ethnicity was not statistically significant (F (1, 123) = .06, p > .05), which indicated that the presence of meaning scores did not show any significant variation across each gender (male and female) and ethnicity (Caucasians and non-Caucasians) category. Therefore, the interaction term was removed from the model, and the analysis was re-conducted without the interaction term. Results indicated that no statistically significant differences existed in the presence of meaning in life scores for each category of gender (F (1, 124) = .74, p > .05) and ethnicity (F (1, 124) = 1.25, p > .05), suggesting that in this sample of veterans, there were not any statistically significant differences in presence of meaning in life scores among male and female student veterans, as well as Caucasian and non-Caucasian student veterans.

Another ANOVA procedure was utilized to explore the effect of gender and ethnicity on the search for meaning in life scores. The interaction effect between gender and ethnicity was also tested (gender * ethnicity). The results showed that the interaction effect between gender and ethnicity was not statistically significant (F (1, 123) = .46, p > .05). Therefore, the interaction term was removed from the model and then the ANOVA procedure was re-run without the interaction term. Results showed that the main effects for gender and ethnicity were not statistically significant. In other words, the mean difference in the search for meaning in life scores was not statistically significant between males and females (F (1, 124) = .00, p > .05), and

was also not statistically significant between Caucasians and non-Caucasians (F (1, 124) = .06, p > .05). The results of these ANOVA procedures are found in Table 5 below.

Table 5

Results of Analysis of Variance (ANOVA) procedures (n=127)

Subscales	Gender				Ethnicity			
	Male	Female	F	*p*	Caucasian	Non-Caucasian	F	*p*
MIL-P	27.23	26.18	.74	.39	26.01	27.40	1.25	.27
MIL-S	23.52	23.56	.00	.98	23.35	23.73	.06	.81

Note. All F values were non-significant

Additional Analyses

Additional exploratory analyses were completed to determine if there were any significant differences in MLQ scores for participants who reported deployment to a combat zone, and those who reported not being deployed to a combat zone. Analysis of Covariance (ANCOVA) procedures were utilized to explore the effect of participant exposure to combat on the presence of meaning in life scores, as well as on the search for meaning in life scores. The independent variable was participant exposure to combat, and the dependent variable was participant scores on the MLQ subscales, including the presence of meaning and the search for meaning. In order to increase the power of detecting a significant difference between two groups of participants, and given that both career thoughts and depression were found to be statistically significant predictors of the presence of meaning in life in previous analyses, both of these variables were selected as covariates in the current analysis. Participants were divided into two

groups, those who indicated that they were exposed to combat during their military service (n = 73), and those who specified that they were not exposed to combat (n = 59).

The ANCOVA results revealed that no statistically significant differences existed in the presence of meaning in life scores (F (1, 128) = 1.85, $p > .05$), as well as the search for meaning in life scores (F (1, 128) = .40, $p > .05$) between the two groups of participants, suggesting no statistically significant differences in meaning in life scores among student veterans who were exposed to combat during their military service, and those who were not exposed to combat. The results of the ANCOVA procedures can be found in Table 6 below.

Table 6

Results of Analysis of Covariance (ANCOVA) Procedures (n=132)

	Exposure to Combat			
Subscales	Combat	No Combat	F	*p*
MIL-P	26.97	26.15	1.85	.18
MIL-S	23.19	23.80	.40	.53

Note. All F values were non-significant

CHAPTER 5

DISCUSSION

College student veterans may experience a variety of challenges as they transition from military life to student life, including adjusting to the academic environment, coping with mental health concerns such as depression and anxiety, redefining their identities, and balancing multiple roles (e.g., family, school, and work) (Ackerman et al., 2009; DiRamio et al., 2008; Rudd et al., 2011; Rumann & Hamrick, 2010). In addition, research indicates that veterans may experience difficulty in finding meaning and purpose outside of the military (Brenner et al., 2008; Doenges, 2011). The challenges veterans face as they transition from military life into their roles as college students can potentially impact their success in the academic classroom, as well as their career decision making. Given the limited amount of research on college student veterans' career development concerns, it is essential to learn more about variables related to meaning in life among this population. Learning more about meaning and purpose among student veterans may have implications for their academic and career success, as well as for professionals working with this population.

The purpose of the current study was to add to the career development literature related to college student veterans and explore variables which may influence meaning and purpose in their lives, specifically career thoughts and depression. The current study utilized a passive observational research design to survey a sample of 132 college student veterans attending higher education institutions across different geographic locations in the United States. Participants represented a diverse sample across various ages, military branches, and classification levels. Career thoughts was measured using the Career Thoughts Inventory (CTI; Sampson et al., 1996a), and depression was measured using the Center for Epidemiologic

Studies Depression Scale – Revised (CESD-R; Eaton et al., 2004). Meaning in life was assessed using the presence of meaning and the search for meaning subscales of the Meaning in Life Questionnaire (MLQ; Steger et al., 2006).

This chapter includes a discussion of the findings for each of the four research questions and hypotheses. In addition, limitations of the study and areas for future research are discussed. Lastly, implications for practitioners working with student veteran populations are included.

Discussion of Findings

Research question one. It was hypothesized that the total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) would be significant positive predictors of scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ-P), and that there would be significant variance in the presence of meaning in life scores accounted for by total scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R). This hypothesis was tested by conducting a linear multiple regression analysis with simultaneous entry. The regression analysis revealed that both career thoughts and depression were statistically significant predictors of the presence of meaning in one's life, with career thoughts emerging as the strongest predictor of meaning in life scores and depression emerging as the second strongest predictor. In addition, 46% of the variance in the presence of meaning in life scores was accounted for by career thoughts and depression.

The current study extended the research on a construct in CIP theory, specifically negative career thoughts, by examining its relationship with meaning in life among a college student veteran sample. Results of the regression analysis suggested that student veterans who reported greater negative career thoughts were more likely to experience lower levels of meaning

and purpose in life. In other words, career thoughts can serve as an influential construct to assess for a student veteran's meaning and purpose in life. These findings indicate that higher total scores on the Career Thoughts Inventory (CTI) may predict lower scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ-P).

Furthermore, the results of a hierarchical multiple regression analysis found that participant scores on the CTI explained 40% of the variance in the presence of meaning in life scores, highlighting the potential impact that negative career thoughts have on a student veteran's report of meaning and purpose in life. CIP theory asserts that negative career thoughts can exist across all domains of the pyramid of information processing, as well as across all phases of the CASVE cycle (Sampson et al., 1996a; Sampson et al., 2004). Therefore, student veterans who are experiencing negative career thoughts may also report limited self-knowledge related to their values, interests, skills, and employment preferences, limited knowledge related to their occupational, educational, and employment opportunities, and limited knowledge related to their career decision-making process (Sampson et al., 2013). Essentially, negative career thoughts can not only impact a student veteran's report of meaning and purpose in life, but can also influence each domain of the pyramid of information processing, thus impacting a student veteran's readiness to benefit from career services (Sampson et al., 2013; Sampson et al., 2000). Given this information, it is important to consider each domain of the pyramid of information processing, including the knowledge domains, decision-making skills domain, and the executive processing domain, as well as each phase of the CASVE cycle, including communication, analysis, synthesis, valuing, and execution, as each of these fundamental constructs can be impacted by a student veteran's negative career thoughts, which can also influence a student veteran's report of meaning and purpose in life.

Moreover, previous research has demonstrated the relationship of negative career thoughts to psychological well-being and meaning and purpose in college students' lives (Strauser et al., 2008). The Strauser et al. (2008) study found that individuals who reported meaning and purpose in their lives demonstrated lower levels of commitment anxiety and higher levels of vocational identity. In other words, college students who reported a sense of meaning and purpose in their lives exhibited fewer difficulties selecting, prioritizing, and/or committing to a specific career choice and also demonstrated higher levels of self perceptions related to one's goals, interests, personality, and talents.

Results of a hierarchical multiple regression analysis found that scores on the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) explained 6.2% of the variance in the presence of meaning in life scores. Although the proportion of variance was small, depression emerged as a statistically significant predictor of meaning and purpose in this student veteran sample, suggesting that individuals who reported greater depressive symptomology were more likely to report lower levels of meaning and purpose in life. Therefore, higher scores on the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) may predict lower scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ-P).

The findings from the current study extend the research on CBT theory. More specifically, depression emerged as the second strongest predictor of meaning and purpose in a student veteran's life. According to CBT theory, an individual's affect and behavior are influenced by cognitions (Beck, 1995; Beck et al., 1979). Thus, cognitions, emotions, and behaviors are interrelated. The results from the current study indicate that a student veteran's depressive symptomology, which includes affect, mood, emotions, and/or feelings, can not only influence a student veteran's thinking patterns and behaviors, but can also impact a student

veteran's report of meaning and purpose in life. Given the interconnection between cognitions, emotions, and behaviors, and the influence that each of these constructs can have on an individual's depressive symptomology (Beck, 1995; Beck et al., 1979), it would be important to understand that each construct in the CBT model may influence a student veterans' likelihood of self-reporting meaning and purpose in life.

According to logotherapists, meaning can be found in any circumstance or life situation, including the loss of a loved one, trauma and/or suffering, and feelings of guilt (Frankl, 1967a; Frankl, 1986). The results from this study emphasize the importance of assessing for a student veteran's negative career thoughts and depressive symptomology, which may be caused by stressful life circumstances or traumatic experiences. Interventions aimed at targeting a student veteran's dysfunctional thoughts and depressive symptomology may potentially influence a student veteran's report of meaning and purpose in life, reinforcing Frankl's (1992) notion that individuals who are able to find meaning in their lives are able to cope with any suffering.

Lastly, both career thoughts and depression captured a significant, moderate amount of variation in meaning in life scores. These findings suggest that as individuals experience negative thoughts related to their career problem-solving and decision-making processes, as well as exhibit depressive symptomology including sadness, loss of interest, appetite, sleep, ability to concentrate, feelings of guilt, tiredness, agitation, and suicidal ideation, they may also report a lack of meaning and purpose in their lives. These results provide evidence that scores on the Career Thoughts Inventory (CTI) and the Center for Epidemiologic Studies Depression Scale – Revised (CESD-R) can be used to predict the presence of meaning and purpose in a student veteran's life.

Research question two. It was hypothesized that there would be a statistically significant negative relationship between the presence of meaning subscale (MLQ-P) and the CESD-R total score, and a statistically significant positive relationship between the search for meaning subscale (MLQ-S) and the CESD-R total score. Pearson correlation results revealed a significant strong negative relationship between the presence of meaning and depression, which aligns with what previous researchers have found (Kleftaras & Psarra, 2012; Owens et al., 2009; Steger & Dik, 2009). In addition, the results revealed a significant moderate positive relationship between the search for meaning and depression. A previous study conducted by Steger and Dik (2009) found a small positive correlation between the search for meaning and depression.

Previous researchers have suggested that the meaning in life search scale (MIL-S) and the meaning in life presence scale (MIL-P) are not mutually exclusive (Heintzelman & King, 2014; Steger et al., 2006; Steger & Kashdan, 2007). Therefore, it is important to consider both of these subscales separately. In other words, individuals who possess meaning in their lives may still persist in their search for meaning. The results of the correlation analyses suggest that student veterans searching for meaning and purpose in their lives are likely to report higher levels of depressive symptomology. Furthermore, student veterans experiencing meaning and purpose in their lives are less likely to report depressive symptomology.

Findings also support previous research related to the benefits of incorporating meaning into one's life. A study completed by Steger et al. (2006) found that individuals who viewed their lives as meaningful reported a higher quality of life including fewer depressive symptoms, positive emotions such as love and joy, greater life satisfaction, and enhanced self-esteem and optimism. Moreover, the results from the correlation analyses highlight the importance of

addressing meaning and purpose with student veterans, as this can help alleviate possible mental health concerns such as depression and anxiety (Southwick et al., 2006).

CBT theory-based interventions aim to assist individuals in targeting and modifying maladaptive thinking and behavioral patterns, as well as cognitive schemas, which influence individuals' affect (Beck, 1995; Beck et al., 1979). Assisting student veterans in challenging and altering dysfunctional schemas that are underlying their automatic thoughts (Beck et al., 1979; Wenzel et al., 2011) may influence a veteran's self-report of meaning and purpose in life. Furthermore, according to Frankl (1986), individuals can find meaning in almost any experience, including traumatic experiences. More specifically, student veterans who were exposed to combat during their military service may benefit from interpreting the concrete meaning of their deployment experiences, confronting the situations they encountered, and actualizing their values (Frankl, 1961; Frankl 1967b; Frankl, 1986), as each of these are goals of logotherapists seeking to assist individuals in fulfilling the meaning of their existence. Furthermore, addressing each of these areas with a student veteran may enhance a veteran's self-report of meaning and purpose in life, and possibly decrease depressive symptomology.

Research question three. It was hypothesized that there would be a statistically significant negative relationship between the presence of meaning subscale and the CTI total score, and a statistically significant positive relationship between the search for meaning subscale and the CTI total score. The results indicated a significant strong negative relationship between the presence of meaning and negative career thoughts, a finding similar to what Strauser et al. (2008) found. In addition, results also indicated a significant moderate positive relationship between the search for meaning and career thoughts. The results of the correlation analyses suggest that student veterans searching for meaning and purpose in their lives are likely to report

higher levels of negative thinking related to their career decision-making and problem-solving processes. Furthermore, student veterans experiencing meaning and purpose in their lives are less likely to report negative thoughts related to their career decision making. Moreover, career thoughts appear to be an influential construct in further understanding a student veteran's meaning and purpose in life. In other words, interventions aimed at targeting a student veteran's career thoughts may potentially influence a veteran's report of meaning and purpose in life.

Drawing from CIP theory, negative thoughts can influence each of the pyramid of information processing domains, as well as each phase of the CASVE cycle (Sampson et al., 1996a; Sampson et al., 2004). Therefore, when working with student veteran populations, it would be important to attend to negative thoughts and statements such as "There are few jobs that have real meaning," or "I am most concerned about finding a job that is meaningful to me," as these statements can influence other aspects of the career problem-solving and decision-making process, including a veteran's self-knowledge, options knowledge, and decision making skills. Given that self-knowledge and options knowledge are fundamental ingredients for a client's career decision making (Reardon et al., 2012), it would be useful to assist student veterans in finding viable options that not only align with their values, interests, and abilities, but are also meaningful and purposeful to them. According to the results of the correlation analyses, assisting student veterans in finding meaningful and purposeful occupations could potentially reduce the likelihood of veterans' self-reporting negative thoughts related to their career decision making, which could also influence a veteran's report of experiencing meaning and purpose in life.

According to Frankl (1967b), meaning in life can be fulfilled through deeds, experiences, encounters with nature, encounters with others, and hopeless situations (such as trauma,

suffering, and guilt). Therefore, when assisting student veterans in finding meaningful and purposeful careers, it would be useful for veterans to not only consider paid work, but to also consider unpaid work as possible options, including volunteering, internships, job shadowing, and information interviews. There are several advantages for student veterans considering unpaid work as potential options, including the possibility of discovering meaning and purpose (Frankl 1967b; 1992), enhancing occupational and self-knowledge (Sampson et al., 2004), and reducing the likelihood of experiencing negative thoughts related to career decision making (Sampson et al., 2004).

Research question four. Hypothesis four specified that there would not be any statistically significant differences in meaning in life scores, as measured by the subscales of the Meaning in Life Questionnaire (MLQ), between male and female student veterans, as well as between Caucasian and non-Caucasian student veterans. Results of Analysis of Variance (ANOVA) procedures showed no statistically significant differences in the presence of meaning in life scores, as well as in the search for meaning in life scores, for the gender and ethnicity variables. In other words, the mean difference between male and female student veterans was not statistically significant for scores on the presence of meaning or search for meaning subscales. For the presence of meaning subscale, the mean score for male participants was 27.23 and 26.18 for female participants. For the search for meaning subscale, the mean score for male participants was 23.52 and 23.56 for female participants. The data suggests that male and female student veterans in this sample endorsed items on the Meaning in Life Questionnaire (MLQ) in a similar fashion. Regarding ethnicity, on the presence of meaning subscale, the mean score for Caucasian participants was 26.01 and 27.40 for non-Caucasian participants. For the search for meaning subscale, the mean score for Caucasian participants was 23.35 and 23.73 for non-Caucasian

participants. This data suggests that Caucasian and non-Caucasian participants responded similarly to subscale items on the Meaning in Life Questionnaire (MLQ).

Frankl (1959) asserted that individuals can find meaning in life through suffering and traumatic experiences, including incurable diseases, loss of a loved one, and living with a disability. Given that previous studies have found combat exposure to be related to student veteran mental health outcomes including PTSD, depression, and anxiety (Barry et al., 2012a; Blosnich et al., 2015; DiRamio et al., 2008; Elliott et al., 2011; Ingala, 2011; Morreale, 2011; Zinger & Cohen, 2010), it is likely that a student veteran's meaning in life may also be influenced by exposure to combat. In addition, Frankl (1959) noted that individuals can survive harsh conditions knowing there is meaning in one's life, tasks to be fulfilled, and accomplishments to achieve. This may explain why significant differences in MLQ scores did not emerge for male and female student veterans, as well as for Caucasian and non-Caucasian student veterans. Rather, potential differences in MLQ scores may exist among other variables including length of time served in the military, whether or not service members were deployed, the number of deployments service members participated in, and whether or not service members were exposed to combat during their military service.

Baechtold and De Shawl (2009) indicated that the number of women serving in combat roles is increasing, thus exposing many female veterans to the dangers of war and combat. In addition, Dohrenwend et al. (2008) found that exposure to war zone stressors accounted for differences in PTSD scores among Whites and Blacks, although this finding may have been due to Black participants reporting higher rates of prejudice, discrimination, and adverse reactions upon return from service. Nevertheless, a significant amount of veterans, regardless of their gender and ethnicity, are beginning to witness an increase in exposure to combat and war zone

stressors (Baechtold & De Shawl, 2009; Barry et al., 2012a; DiRamio et al., 2008; Dohrenwend et al., 2008; Elliott et al., 2011; Ingala, 2011; Katz et al., 2010; Morreale, 2011; Rudd et al., 2011; Zinger & Cohen, 2010). Given this information, additional research is needed to determine the relationships among deployment factors (e.g., exposure to combat, number of military deployments), the presence of meaning, and the search for meaning among college student veteran populations.

Limitations of the Study

In addition to the delimitations reviewed in chapter 1, there are a few limitations regarding the current study. This section includes an overview of the limitations in sampling including the diversity of the current study's sample, as well as the use of online survey research.

First, the majority of participants in the current study primarily identified as Caucasian and male. Given this information, the comparison groups utilized in research question number four were significantly different for both males and females, as well as for Caucasians and non-Caucasians. Due to the small number of participants in each ethnicity category, the researcher utilized a dichotomous classification and collapsed this category into "Caucasian" and "non-Caucasian" participants. However, it would have been useful to have a greater number of participants across each gender, as well as across ethnicity categories, as this would have enhanced the statistical power and generalizability of the current study's findings.

Furthermore, the researcher utilized a random numbers table to arbitrarily select 60 universities and 30 community colleges to send email invitations. Although attempts were made to minimize the possibility of selection bias and to send invitations to community colleges and universities across six different geographic locations of the United States, the majority of participants reported attending college in the southeast part of the United States (75.8%). Having

a more equivalent number of participants across other geographic locations in the United States (northeast, midwest, southwest, south, and west) would have helped generalize the findings to student veterans attending higher education institutions across the U.S.

Lastly, one disadvantage in utilizing online surveys to conduct empirical research is that researchers are not able to track on participants who choose not to complete the survey (Wright, 2005). The characteristics of student veterans who chose to respond to the current study's online survey (n = 132) may be different from student veterans who chose not to respond (n =39), thus creating possible bias. Potential differences between these two groups may have influenced the way participants responded to survey items. In addition, the researcher does not have information regarding the reasons why participants chose not to complete the online survey. Future studies may compare student veterans who drop out of a survey to those who complete the survey, as this may determine whether participants who complete the survey are similar in important ways or different from participants who drop out.

Implications for Practice

Knowing more about how student veterans experience meaning and purpose as they transition from military to student life can assist both mental health and career development professionals in further understanding the transitional challenges and experiences they encounter. For instance, the results of this study have potential implications for positively impacting the overall well-being of the student veteran population. Previous research has found meaning and purpose to be negatively correlated with psychological constructs such as Post-Traumatic Stress Disorder (PTSD), depression, guilt, and suicidal ideation (Bryan et al., 2013b; Kleftaras & Psarra, 2012; Owens et al., 2009; Steger & Dik, 2009). The results of the current study found meaning and purpose to be negatively correlated with both career thoughts and depression.

Furthermore, both career thoughts and depression were statistically significant predictors of the presence of meaning in one's life. In other words, interventions which focus on both the presence of negative career thoughts and depressive symptomology can likely influence a student veteran's report of meaning and purpose in life, as well as enhance a student veteran's well-being.

Additionally, findings from the current study extend the research on CIP theory. For instance, researchers suggest that individuals who experience higher levels of negative thinking may encounter additional barriers in the career decision-making process including lack of readiness to engage in decision making and insufficient amount of information about self, options, and/or the decision-making process (Kleiman et al., 2004; Sampson et al., 1996a; Sampson et al., 2004). An additional barrier that student veterans may encounter includes experiencing a lack of meaning and purpose in life. Therefore, assessing for negative thinking can not only assist student veterans in identifying, challenging, and altering their negative thoughts, but can also influence student veterans' report of meaning and purpose in life.

Furthermore, CIP theory asserts that negative career thoughts can occur across all of the pyramid of information processing domains, as well as influence all of the CASVE cycle phases (Sampson et al., 1996a; Sampson et al., 2004). For instance, the top part of the pyramid of information processing, also known as the executive processing domain, largely influences the functioning of the decision-making skills and knowledge domains (Sampson et al., 2004). Therefore, student veterans experiencing negative career thoughts may be less likely to engage in the problem-solving and decision-making processes, thus directly impacting the decision-making skills domain, and subsequently impacting the knowledge domains. Furthermore, given that negative career thoughts can occur in all phases of the CASVE cycle, this may cause student

veterans' to avoid engaging in the career problem solving process (e.g., communication), inappropriately progress through the decision making process, or discontinue the process altogether (Sampson et al., 1996a). Additionally, negative career thoughts can impair veterans' ability to clarify their values, interests, skills, and employment preferences, as well as influence their knowledge of occupational, educational, and employment options in the knowledge domains (Sampson et al., 2004). Thus, when working with student veteran populations, it would be useful for career practitioners to assess for negative thoughts occurring in any domain of the pyramid of information processing, as well as any phase of the CASVE cycle, as this can interfere with a veteran's ability to appropriately engage in career problem-solving and decision-making tasks, as well as impact a veteran's willingness to continue utilizing career services.

Career practitioners utilizing CIP theory may incorporate several different interventions into their work with student veterans (Buzzetta & Rowe, 2012; Clemens & Milsom, 2008; Hayden & Buzzetta, 2014; Stein-McCormick et al., 2013). While assisting veterans in enhancing their self-knowledge, career practitioners may utilize traditional and/or non-traditional assessments to expand veterans' knowledge of their values, interests, skills, and personality preferences. In addition, card sort activities and transferable skills checklists can be useful tools to assist student veterans in increasing their self-knowledge. Furthermore, the Self-Directed Search (SDS; Holland & Messer, 2013) is an assessment based on John Holland's RIASEC theory which assesses for interests and abilities, and how these fit into a person's environment. After student veterans' complete the SDS and obtain a Holland summary code, career practitioners can utilize the Veterans and Military Occupations Finder (VMOF; Messer, Greene, & Holland, 2013) in conjunction with other SDS materials (e.g., Occupations Finder; Educational Opportunities Finder) to assist student veterans in applying their military skills and

abilities to potential civilian occupational titles. The VMOF can also be used to assist student veterans in exploring meaningful and purposeful career options. The VMOF is divided into two sections, the Military Occupations Index and the Military to Civilian Occupations Crosswalk (Messer et al., 2013). The Military Occupations Index allows student veterans to search for their Military Occupational Classification (MOC) and identify the assigned two-letter Holland code. The second section includes the Military to Civilian Occupations Crosswalk, which allows student veterans to identify the corresponding civilian occupational title for each MOC, as well as the two-letter Holland code (Messer & Greene, 2014). In both sections of the VMOF, MOC's are included for five military branches: Air Force, Army, Coast Guard, Marine Corps, and Navy.

To assist student veterans in expanding their occupational knowledge, career practitioners might incorporate relevant websites, such as the O*Net military crosswalk (National Center for O*NET Development, n.d.), into conversations with student veterans. This website allows veterans to explore civilian occupational titles which correspond with their MOC's, and can also be used in conjunction with the VMOF, which provides O*Net codes for each civilian occupation included in the Military to Civilian Occupations Crosswalk section. In addition to utilizing relevant websites, career practitioners might encourage student veterans to engage in information interviewing, job shadowing, and networking events (such as student veteran information exchanges and federal career fairs) to further enhance their options knowledge (Buzzetta & Rowe, 2012).

Furthermore, there are several resources career practitioners can utilize to assist student veterans in enhancing their decision-making skills, including the *Guide to Good Decision Making* exercise (Sampson, Peterson, Lenz, & Reardon, 2015), the Decision Space Worksheet (DSW; Peterson, Leasure, Carr, & Lenz, 2010), and the Individual Learning Plan (ILP; Sampson

et al., 2004). Many of these resources may allow insight into factors which contribute towards a veteran's meaning and purpose in life. The *Guide to Good Decision Making* is an exercise which allows student veterans the opportunity to document their thoughts and feelings, as well as monitor their progress, as they move through the career decision-making process (Sampson et al., 2015). The Decision Space Worksheet (DSW) is a projective activity that can be utilized to assist student veterans in eliciting factors (such as individuals, circumstances, emotions, and events) which influence their decision making (Peterson et al., 2010). Lastly, the Individual Learning Plan (ILP) is a tool that helps student veterans and career practitioners mutually agree upon goals, as well as document the purpose and priority of each activity, in addition to the time commitment required (Sampson et al., 2004). This resource also allows student veterans to monitor their progress as they move through the career problem-solving and decision-making process.

Given the findings from the current study, career practitioners working with student veteran populations may consider utilizing a screening instrument, such as the Career Thoughts Inventory (CTI; Sampson et al., 1996a), to determine a student veteran's readiness for career decision making (Sampson et al., 2013), and to also monitor potential thoughts which may be impacting domains of the pyramid of information processing. It would be important for career practitioners to consider and attend to student veterans with CTI total scores above the mean for their normative group. When scores are above the mean, it would be useful to assist individuals in identifying, challenging, and altering their negative thinking through use of drop-in career advising services, individual and group career counseling, individual and group mental health counseling, and ongoing workshops. If these services are not available in a career services setting where veterans are seeking assistance, the office could provide referral resources on campus and

within the community where the intersection of mental health and career concerns could be explored as appropriate to the student veteran's situation. In addition, the Career Thoughts Inventory (CTI) workbook (Sampson, Peterson, Lenz, Reardon, & Saunders, 1996b) could be used to assist student veterans in becoming more aware of their negative career thoughts, and improving their thoughts through activities which challenge and alter thinking patterns which may be impairing a student veteran's career decision-making and problem-solving process.

Additionally, according to CBT theory, the way individuals perceive and make sense of their experiences affects their emotional and behavioral responses (Beck et al., 1979). Findings from the current study extend the application of CBT theory in practice, specifically with student veterans. Reducing student veterans' negative cognitions may not only influence a veteran's affect, but may also enhance the possibility of student veterans self-reporting meaning and purpose in their lives. Practitioners utilizing CBT theory may consider incorporating both cognitive and behavioral techniques into their clinical work with student veterans. Prior to incorporating any CBT interventions into practice, it would be useful to provide psychoeducation regarding the interconnection between cognitions, emotions, and behaviors (Wenzel et al., 2011).

Cognitive techniques and interventions can assist student veterans in identifying automatic thoughts, connecting thoughts with emotions, and developing alternative thoughts which reflect reality-based situations (Wenzel et al., 2011). Examples of cognitive strategies to utilize with student veteran populations include Socratic questioning, automatic thought records, coping cards, and the 3 C's approach (Wenzel et al., 2011). Socratic questioning is a method that can be used to evaluate the validity of veterans' automatic thoughts and assist them in developing alternative responses. Automatic thought records are tools which allow individuals to gather data regarding situations that cause a shift in affect, and also record the automatic

thoughts associated with the situation and emotion. Coping cards are utilized to assist individuals in recognizing their automatic thoughts and over-learning the new, adaptive thoughts. Generally, automatic thoughts are placed on one side of the card, and the alternative thoughts are placed on the opposite side. Lastly, the 3 C's approach (catch it, check it, change it) is an acronym that allows individuals to manage their emotions. Essentially, individuals are taught to catch their automatic thoughts, check the validity and usefulness of these thoughts, and change their automatic thoughts into more accurate and balanced thoughts (Beck et al., 1979; Wenzel et al., 2011).

In addition to incorporating cognitive strategies and techniques into clinical work with student veterans, it may be useful to integrate behavioral strategies as well. Behavioral strategies can assist student veterans in improving their mood and becoming more active, engaged, and present in their environments (Wenzel et al., 2011). Examples of behavioral techniques and interventions include activity monitoring, activity scheduling, pleasant events scheduling, behavioral activation, graded task assignment, and relaxation training (Beck et al., 1979; Wenzel et al., 2011). Activity monitoring allows individuals to record activities they are engaging in on a daily basis, and rate each activity according to pleasure obtained, mastery/accomplishment obtained, and overall daily mood. Activity scheduling involves brainstorming and identifying activities that provide individuals with a sense of pleasure and mastery/accomplishment, and scheduling these activities into a daily and/or weekly routine. A pleasant events schedule is a checklist that allows individuals to select meaningful activities which provide them with pleasure and mastery, and identify how often they have engaged in each activity in the past month. Behavioral activation is a procedure that allows individuals to identify meaningful and enjoyable activities and commit to completing these activities in between counseling sessions. Graded task

assignment is commonly utilized with the activity schedule and involves breaking down tasks into smaller steps to achieve a larger goal. Lastly, relaxation training is useful to utilize with student veterans who present with depression and/or anxiety and may include techniques such as meditative breathing, progressive muscle relaxation, and guided imagery (Beck et al., 1979; Wenzel et al., 2011).

Research indicates that veterans may experience difficulty in finding meaning and purpose outside of the military (Brenner et al., 2008; Doenges, 2011). Furthermore, Frankl (1958; 1967a) asserted that individuals are naturally searching, striving, and struggling to find meaning and purpose in their lives. Given this information, counseling professionals working with student veteran populations can empower their clients to find meaning and purpose in life. Challenging clients and helping them to evoke their will to meaning are essential ingredients of logotherapy (Frankl, 1961). Furthermore, the emphasis is on helping individuals confront, reorient, and become aware of the meaning in their lives (Frankl, 1992).

Accordingly, when working with student veterans, it might be useful to incorporate the constructs of meaning and purpose into counseling conversations about their career and life plans. This can be accomplished through asking questions such as "How meaningful do you find your current work activities?" and "What about your current work activities is meaningful?" (Dik, Duffy, & Eldridge, 2009). If a student veteran is not currently employed, asking questions such as "What brings you meaning in life?," "How important is it to you to find meaning in your paid employment?," or "What types of activities have you found most meaningful to this point in your life?," can assist veterans in exploring future jobs, positions, and career options which incorporate activities that are meaningful and purposeful. In addition to assessing for the presence of meaning in student veterans' lives, having conversations about their search for

meaning can also prove to be beneficial. Open-ended questions such as "Describe a time in your life in which you felt fulfilled" or "What or who do you want your work to impact?" (White & Valusek, 2015) can assist student veterans in further exploring their search for meaning. Integrating assessments, such as the Work and Meaning Inventory (WAMI; Steger, Dik, & Duffy, 2012), as well as the Meaning in Life Questionnaire (MLQ; Steger et al., 2006), can help student veterans further explore their sense of meaning and purpose. In addition, White and Valusek (2015) recommended allowing individuals to craft their own definitions of meaning and purpose before providing them with any descriptions. Moreover, it may be useful to integrate card sort activities which explore factors that make individuals feel significant, meaningful, and purposeful (White & Valusek, 2015).

Additionally, depending upon the student veteran's presenting concerns, it is recommended that counseling professionals working with student veteran populations assess for depressive symptomology which may be influencing a veteran's personal sense of meaning and purpose. A previous study conducted with an active duty military sample found that a stronger sense of meaning in life was significantly associated with less emotional distress, less severe suicidal ideation, and better life functioning (Bryan et al., 2013b). The Bryan et al. (2013b) study also found that a stronger sense of meaning in life was significantly associated with four life domains including work, intimate relationships, non-family relationships, and leisure activities. In other words, participants who reported higher presence of meaning in life also specified stronger work performance, enhanced relationships with both family and non-family members, and fulfillment in leisure activities. Given this information, it would be important for counseling professionals working with student veteran populations to assess these four domains, and also inquire about protective factors which may reduce the risk of depressive symptomology in

veteran populations including social support, interpersonal relationships, strengths, skills, and coping mechanisms (Campbell & Riggs, 2015; Doenges, 2011; Ingala, 2011; Whiteman et al., 2013; Young, 2012). In addition, practitioners using CBT theory to assist student veterans in modifying and replacing maladaptive thoughts can know that there is research connected to depressive symptomology and the presence of meaning in life. Therefore, assisting student veterans in reducing their negative cognitions may also serve to augment the presence of meaning and purpose in their lives.

Implications for Research

This study includes several implications for individuals conducting research on college student veteran populations. One implication for research stems from the finding that the CTI total score emerged as a strong predictor of participant scores on the presence of meaning subscale of the Meaning in Life Questionnaire (MLQ-P). The CTI total score also had significant, strong to moderate, correlations between the presence of meaning and search for meaning subscales. Given this information, future studies could utilize the CTI subscales, including decision-making confusion, commitment anxiety, and external conflict, to further explore the relationship between specific aspects of negative thinking and meaning and purpose in a student veteran's life. For instance, Strauser et al. (2008) utilized the CTI subscales to examine the effect of psychological well-being (measured using six dimensions: autonomy, environmental mastery, personal growth, positive relationships with others, purpose in life, and self-acceptance) on negative career thoughts. Results of a regression analysis revealed that the six dimensions of psychological well-being accounted for 25% of the variance in decision-making confusion, 40% of the variance in commitment anxiety, and 24% of the variance in external conflict. In addition, the purpose in life dimension demonstrated a unique contribution

towards the CTI's commitment anxiety subscale. These findings suggest a relationship between psychological well-being and an individual's negative career thoughts, particularly related to difficulties individuals experience initiating and sustaining their career decision-making process, balancing self-perceptions with input received from others, and appropriately managing anxiety which accompanies the decision-making process. Future studies may consider incorporating the CTI subscales into studies which explore meaning and purpose in a student veteran's life. Knowing more about the relationship between a student veteran's meaning and purpose in life and the CTI subscales, including decision-making confusion, commitment anxiety, and external conflict, can provide further insight into interventions for career development practitioners working with this population.

Given that other measures which assess the severity of depression, such as the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996), are commonly utilized in university counseling centers, it may be useful to incorporate the BDI into future studies with college student veteran populations. Previous researchers examining negative career thoughts in terms of its relation to various psychological and mental health constructs among college student populations (Dagenhart, 2005; Dieringer, 2012; Saunders, 1998; Saunders et al., 2000; Walker & Peterson, 2012) have measured depression using the BDI. Given this measure's utility on college campuses, as well as across research studies, it would be beneficial to examine its potential to predict meaning and purpose among student veteran populations.

Furthermore, given that there is a minimal amount of research on college student veterans' career development concerns, it would be useful to explore other career assessment tools commonly utilized with college student populations, such as the Self-Directed Search (SDS; Holland & Messer, 2013) and/or the Strong Interest Inventory (SII; Strong, Donnay,

Morris, Schaubhut, & Thompson, 2004), and the relationship these assessments have with meaning and purpose in a student veteran's life. More specifically, research could examine the SDS secondary constructs (e.g., consistency, congruence, differentiation) as predictor variables in the model to determine their influence on meaning and purpose in a student veteran's life. For instance, Dozier, Lenz, and Freeman (2016) provided a case example which demonstrated the use of theory-based assessments, specifically the Self-Directed Search (SDS) and the Career Thoughts Inventory (CTI), to explore clients' mental health and career concerns. In this article, Dozier et al. (2016) highlighted that information derived from the SDS secondary constructs, as well as from a client's CTI scores, can potentially provide insight into possible mental health concerns, as well as readiness factors, which may be impacting an individual's ability to effectively engage in career decision making.

Additionally, results of ANCOVA procedures did not produce significant differences in the presence of meaning in life scores or the search for meaning in life scores among student veterans who were exposed to combat and those who were not exposed to combat during their military service. For the presence of meaning subscale, the mean score for participants who were exposed to combat was 26.97 and 26.15 for participants who were not exposed to combat. For the search for meaning subscale, the mean score for participants who were exposed to combat was 23.19 and 23.80 for participants who were not exposed to combat. This data suggests that combat and non-combat student veterans in this sample endorsed items on the Meaning in Life Questionnaire (MLQ) in a similar fashion. Given these findings, it may be useful for future researchers to consider extending the research on the nature of deployment and the impact this has on student veterans' meaning and purpose in life.

A previous study conducted by Bryan et al. (2013a) found that a greater number of deployments significantly influenced a veteran's meaning in life. Bryan et al. (2013a) also noted that type of deployment experience may influence a veteran's meaning in life, including combat exposure (e.g., missions which require exposure to weapons and being fired upon) and exposure to aftermath events (e.g., injuries, deceased bodies, and shattered communities). Future researchers may consider exploring deployment variables (e.g., number of deployments, type of deployment experience) among college student veteran populations, as this can provide useful information for practitioners seeking to assist veterans in finding meaning and purpose in life. Moreover, it would be beneficial to also explore other military characteristics, such as length of service and military rank/pay grade, as these variables may influence a veteran's report of meaning and purpose in life as well.

Additionally, Frankl (1961) emphasized the importance of focusing on the meaning of an individual's existence, as well as an individual's search for meaning. Previous researchers have also indicated that individuals who possess meaning in their lives may still persist in their search for meaning (Heintzelman & King, 2014; Steger et al., 2006; Steger & Kashdan, 2007). Given that the Meaning in Life Questionnaire (MLQ) has two subscales which capture different and valuable information, it would be useful for future researchers conducting research with student veterans to consider utilizing both MLQ subscales, including the presence of meaning and search for meaning. By utilizing both subscales, practitioners may better understand the relationship between these fundamental constructs, as well as develop interventions to assist student veterans in finding meaning and purpose in life.

Furthermore, future research on college student veteran populations may consider incorporating an incentive for participation. While the current study obtained the specified

number of participants to conduct the analyses, the sample may have been increased by including an incentive for individuals to participate in the survey. Specifically, the researcher received a low rate of email responses from Veterans Directors and/or Coordinators across the United States. For instance, a total of 12 responses were received from Veterans Directors and/or Coordinators, specifying their interest in forwarding the researcher's email invitation to student veterans attending their institutions. Additionally, a number of Veterans Directors and/or Coordinators inquired about a potential research incentive in hopes of piquing student veteran interest at their institutions. Having an incentive for the current study likely would have increased the interest in student veteran participation, as well as enhanced the sample's diversity including participant gender and ethnicity. An incentive also would have possibly increased the number of participants who responded from different geographic regions of the United States.

Lastly, the current study utilized three theoretical orientations to guide the research questions and hypotheses, including cognitive information processing (CIP; Sampson et al., 2004), cognitive behavioral theory (CBT; Beck et al., 1979), and logotherapy and existential theory (Frankl, 1967a; Frankl 1967b). This study is one of the first quantitative studies which applied CIP theory as a framework for research with a student veteran population. In addition, previous studies which have explored mental health concerns among college student veterans have not utilized theory to guide their research (Buzzetta & Miller, 2015). The current study incorporated CBT and logotherapy as additional theoretical orientations to guide the research questions and hypotheses. Given this information, as well as recommendations made by Robertson et al. (2014), it would be useful for future researchers conducting research on college student veteran populations to incorporate relevant theory applications into their empirical

research, and to also explain the theoretical implications that their research findings have for practitioners working with student veteran populations.

Conclusion

The present study surveyed a sample of 132 student veterans attending higher education institutions across the United States to learn more about specific variables which influence meaning and purpose in their lives, including career thoughts and depression. Regarding demographic characteristics, participants ranged across ages, military branches, and classification levels. The results of this study revealed that career thoughts and depression were statistically significant predictors of the presence of meaning in a student veteran's life. Therefore, interventions aimed at targeting negative career thoughts and depressive symptomology may enhance student veterans' self-report of meaning and purpose in their lives. This study also supports previous findings which have found meaning and purpose to be negatively correlated with psychological constructs such as Post-Traumatic Stress Disorder (PTSD), depression, guilt, and suicidal ideation (Bryan et al., 2013b; Kleftaras & Psarra, 2012; Owens et al., 2009; Steger & Dik, 2009). Given this information, it would be useful to address the constructs of meaning and purpose when working with student veteran populations. This could be accomplished by administering relevant assessments, asking open-ended questions, and allowing individuals to construct their own definitions of meaning and purpose.

In addition, assessing a student veteran's readiness to make career decisions would also be beneficial. Utilizing readiness measures, such as the Career Thoughts Inventory (CTI; Sampson et al., 1996a), can assist student veterans in increasing their awareness related to thoughts which may be interfering with their ability to make effective career decisions. Having conversations about how veterans' view the concepts of meaning, purpose, and significance in

their lives may also be useful, in addition to assessing for depressive symptomology and protective factors such as satisfaction with work, intimate relationships, non-family relationships, and leisure activities (Bryan et al., 2013b). Furthermore, incorporating cognitive and behavioral techniques into clinical work with student veterans can help improve their mood and assist them in developing thoughts which reflect reality-based situations (Beck et al., 1979; Wenzel et al., 2011).

Lastly, individuals conducting research on student veteran populations may consider incorporating the CTI subscales into future studies which explore meaning and purpose in a veteran's life, including decision-making confusion, commitment anxiety, and external conflict, as subscale scores may help to improve the understanding of the relationship between meaning in life and career thoughts. It may also be useful to utilize other mental health and/or career assessments, such as the Beck Depression Inventory-II (BDI-II; Beck et al., 1996), Self-Directed Search (SDS; Holland & Messer, 2013), and/or the Strong Interest Inventory (SII; Strong et al., 2004) as potential predictors of meaning and purpose among student veteran populations. In addition, knowing more about the relationships between MLQ subscales and deployment variables (e.g., number of deployments, type of deployment experience), as well as other military characteristics (e.g., length of service and military rank/pay grade), can provide useful information for practitioners seeking to assist student veterans in finding meaning and purpose in life. Lastly, future studies among college student veteran populations may consider incorporating an incentive for participation, as well as utilizing relevant theories to guide their research.

APPENDIX A

INFORMED CONSENT

AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT titled:
Exploring career and personal characteristics of meaning in life among college student veterans

You are being invited to participate in a research study entitled "Exploring career and personal characteristics of meaning in life among college student veterans." This consent form provides you with information about the study. Your participation is entirely voluntary, and you can refuse to participate or withdraw at any time without penalty or loss of benefits to which you are otherwise entitled. Please carefully read the information below prior to agreeing to participate in the study.

Purpose: The purpose of this study is to evaluate selected variables relevant to college student veterans' career development. You are being invited to take part in this study because you are enrolled full-time or part-time in a higher education institution, and have served, or are currently serving, in one of the United States military branches. Student veterans enrolled in online college programs are also eligible to participate in this study.

Description of Study: College student veterans attending higher education institutions will be asked to complete questionnaires related to career variables which may influence meaning in life among college student veterans. The forms and assessments will take an estimated 10-15 minutes to complete. Participation in this project is completely voluntary.

Benefits to the participant: The knowledge gained from this study will contribute to understanding college student veterans' career development concerns. The results will help inform counselors and other practitioners on how to better address the concerns of college student veterans seeking career-related assistance.

Risks: Foreseeable risks associated with the project may include an increase in distress about some of the questions or topics in this study. If this occurs, participants are encouraged to contact their college or university counseling center, the Department of Veterans Affairs (VA) Vet Center Program, www.vetcenter.va.gov, the Veterans Crisis Line, 1-800-273-8255 (press 1), or the national crisis hotline, www.211.org (this site can also provide resources for local geographic areas). In addition, a list of information and referral resources (including the ones listed above) will be provided on the last page of the hyperlink. While participants are encouraged to complete each of the sections included in the hyperlink, there is no penalty for withdrawing from this study at any time.

Confidentiality: Your responses are completely anonymous and cannot be associated with you in any way. All efforts will be made to protect participant's privacy and to maintain the confidentiality of the data acquired through this project. Individual participants will not be identified by name. The computerized data will be maintained numerically with no identifying information. Researchers will have access to all data obtained during this study.

Subject's Assurance: Participation in this project is completely voluntary, and subjects may withdraw from this study at any time without penalty, prejudice, or loss of benefits. Questions concerning the research should be directed to the primary researcher, Mary Buzzetta, or her faculty advisor, Janet Lenz, Ph.D.

This project and this consent form have been reviewed by the Florida State University (FSU) Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306 – 2742, or by calling (850) 644-8633, or emailing humansubjects@magnet.fsu.edu

Questions or concerns: If any feelings are brought up for you during or after the survey that you would like to discuss further, then you are encouraged to contact your college or university counseling center, or the Department of Veterans Affairs (VA) Vet Center Program, www.vetcenter.va.gov, the Veterans Crisis Line, 1-800-273-8255 (press 1), or the national crisis hotline, www.211.org (this site can also provide resources for local geographic areas).

Signatures: If you agree with the information provided above and are willing to participate in this research, please indicate your voluntary consent by reading and clicking on the appropriate box below. By checking the box below and agreeing to participate in this study, you are also acknowledging that you understand the risks and benefits of participating in this study. Thank you in advance for your participation.

Please indicate your consent or non-consent to participate in this survey:

☐ I have read the consent form and agree to participate.

☐ I have read the consent form and do not agree to participate.

Before proceeding with the survey, you have the option to print a copy of this page for your records.

APPENDIX B

PARTICIPANT DATA SHEET

Demographic Questionnaire

1) **Are you currently or have you been a member of the U.S. military?**
   - Yes
   - No (you are not eligible to participate in this study)

2) **Age:** _____

3) **Gender**: ____ Man ____ Woman ____ Transgender ____ Other

   ____ Prefer not to respond

4) **Race/Ethnicity**:
   - White/Caucasian
   - Black/African American
   - Hispanic/Latino
   - Asian/Asian American
   - American Indian/Alaskan
   - Hawaiian Native/ Pacific Islander
   - Biracial/Multi-racial
   - Other
   - Prefer not to respond

5) **Marital Status**:
   - Single
   - Married
   - Divorced
   - Separated
   - Widowed
   - Prefer not to respond

6) **Please indicate the geographic location of your college/institution.**
   - Northeast (NY, ME, PA, NJ, CT, VT, NH, RI, MA, MD, DE, WV, DC)
   - Midwest (MI, ND, SD, NE, KS, OH, MO, IL, IN, IA, WI, MN)
   - Southeast (NC, SC, VA, GA, FL)
   - Southwest (TX, NM, OK, AZ, AR)
   - South (LA, AL, MS, TN, KY)
   - West (WA, CA, MT, CO, HI, AK, WY, ID, OR, NV, UT)
   - Not applicable/online institution

7) **Please indicate the type of institution you attend:**
   - Public four-year university

- Private college/university
- Community college
- Technical college
- Online college/university

8) **Classification**:
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate Student (Master's level)
   - Graduate Student (Doctoral level)

9) **What is your <u>current</u> or <u>proposed</u> undergraduate and/or graduate major(s)? If undecided, please write "undecided."**

   _____

10) **Which branch of the military have you served or currently serving in?**
   - Army
   - Air Force
   - Marine Corps
   - Navy
   - Coast Guard

11) **Please specify the amount of time you served/have served in the military:**
   - Less than 1 year
   - Between 1 and 3 years
   - Between 3 and 5 years
   - Between 5 and 10 years
   - Between 10 and 15 years
   - 15 years or more

12) **Please indicate the total number of times you were deployed.**
   - 1
   - 2
   - 3

- 4
- 5
- 6 or more
- Never/not applicable

13) Were you deployed to a combat zone?

- Yes
    - If yes, please specify _____
- No
- Not applicable

APPENDIX C

CORRESPONDENCE TO COLLEGE AND UNIVERSITY STAFF

The following email was sent to college and university staff who work with student veteran populations:

Dear (Insert the Student Veteran's Center Director name here):

My name is Mary Buzzetta, and I am currently a doctoral candidate in Counseling Psychology and School Psychology at Florida State University. I am writing to request your assistance in distributing my dissertation study, entitled "Exploring career and personal characteristics of meaning in life among college student veterans" to student veterans on your campus. The knowledge gained from this study will contribute to understanding college student veterans' career development concerns. The study will take approximately 10-15 minutes to complete and will make a valuable contribution to the career development field.

I would greatly appreciate if you could please forward the email below to student veterans who meet the following criteria:

1) Enrolled full-time or part-time in a higher education institution,
2) Have served, or is currently serving, in one of the United States military branches, and
3) Participants enrolled in online higher education institutions are also eligible for this study.

Thank you in advance for your assistance in distributing this survey to student veterans. Please see below for the formal cover letter and hyperlink to the study.

Mary Buzzetta

Dear Colleague,

My name is Mary Buzzetta, and I am currently a doctoral candidate in Counseling Psychology and School Psychology at Florida State University. I am writing to invite you to participate in a dissertation study entitled "Exploring career and personal characteristics of meaning in life among college student veterans." The purpose of this study is to explore personal characteristics relevant to college student veterans' career development. To participate in the study, participants must meet the following criteria:

1) Enrolled full-time or part-time in a higher education institution,
2) Have served, or is currently serving, in one of the United States military branches, and
3) Participants enrolled in online higher education institutions are also eligible for this study.

On the first page of the electronic hyperlink, participants will be invited to read an informed consent, which reviews the content of the study, provides an explanation of the voluntary nature

of the survey, and reviews the limits to confidentiality. Following the informed consent, participants will be invited to complete a brief demographic form and three assessments, as well as receive a list of referral resources. Participation in this research study is expected to take approximately 10-15 minutes. Your participation is anonymous and completely voluntary. No data will be collected that could be used to identify you.

If you have any questions about this research, you are encouraged to contact the primary researcher, Mary Buzzetta, or her faculty advisor, Janet Lenz, Ph.D. This project has been reviewed according to Florida State University procedures governing human subjects research participation; if you have any questions regarding your rights as a participant in this research, you can contact FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32306-2742, or 850-644-8633, or by email at humansubjects@magnet.fsu.edu.

The survey link can be accessed here: (insert hyperlink)

Thank you in advance for your time and participation,

Mary Buzzetta, M.S., LPC
Career Advisor, Doctoral candidate in the Combined Counseling Psychology and School Psychology program
Florida State University Career Center

Janet G. Lenz, Ph.D., MCC, NCC
Associate-In, Educational Psychology & Learning Systems
Program Director for Instruction, Research, & Evaluation
Coordinator, Career Counseling MS/EdS Major
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APPENDIX D

REFERRAL RESOURCES

The purpose of this study is to explore personal characteristics relevant to college student veterans' career development. Participation in this study may lead to increased insight into feelings of distress and/or depression. The following are a list of helpful resources that provide support for military individuals experiencing depression, worthlessness, and/or suicidal ideation. Please feel free to print this page for your personal reference.

1) If any feelings were brought up for you during or after the survey that you would like to discuss further, then you are encouraged to contact your college or university counseling center, or the Department of Veterans Affairs (VA) to speak with a trained mental health professional.

2) For online support or to locate a **Veteran Affairs facility** near you, please visit http://www.mentalhealth.va.gov/index.asp

3) **Veterans Crisis Line**
   http://www.veteranscrisisline.net/
   1-800-273-8255 and **Press 1**, chat online, or send a text message to **838255** to receive confidential support

4) **Department of Veteran Affairs – Vet Center Program**
   Combat Call Center
   http://www.vetcenter.va.gov/
   1-877-WAR-VETS

5) **National Crisis and Emergency Hotline**
   www.211.org
   Dial 2-1-1

6) **National Suicide Prevention Lifeline**
   http://www.suicidepreventionlifeline.org/
   1-800-273-8255

APPENDIX E

HUMAN SUBJECTS APPROVAL

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date:	04/09/2015
To:	Mary Buzzetta
Dept:	EDUCATIONAL PSYCHOLOGY AND LEARNING SYSTEMS
From:	Thomas L. Jacobson, Chair
Re:	Use of Human Subjects in Research Meaning in life among college student veterans: Exploring career and personal characteristics

The application that you submitted to this office in regard to the use of human subjects in the research proposal referenced above has been reviewed by the Human Subjects Committee at its meeting on 04/08/2015. Your project was approved by the Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 4/6/2016 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by

the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing, any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

CC: Janet Lenz, Advisor
HSC No. 2015.15174

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BIOGRAPHICAL SKETCH

Mary Buzzetta is a doctoral candidate in the Combined Doctoral Program for Counseling Psychology and School Psychology at Florida State University (FSU). Mary obtained a Bachelor of Arts in Psychology from Southeastern Louisiana University and a Master of Science in Counseling Psychology from the University of Southern Mississippi. Following her Master's degree, Mary worked as a Career Counselor for the University of Texas at San Antonio (UTSA) Career Center and obtained her Licensed Professional Counselor (LPC) certification. Her clinical experiences include working with college students in a variety of settings such as FSU's University Counseling Center, Tallahassee Community College's (TCC) Mental Health Services office, and FSU's Student Disability Resource Center (SDRC). In addition, Mary gained clinical experience working for Tallahassee Memorial Hospital, FSU's Employee Assistance Program (EAP), and Roberts Elementary School.

Mary has also worked as a Career Advisor for FSU's Career Center for almost four years. She has experience teaching an undergraduate career planning course and serving as a clinical supervisor for Master's level career counseling graduate students. Mary is extensively involved in the National Career Development Association (NCDA), and has served as the Graduate Student's Department editor for NCDA's *Career Developments* magazine for five years. She has also been an active member of NCDA's Veteran's Committee since 2011, and was selected from a national applicant pool to participate in NCDA's 2014-2015 Leadership Academy.

Mary's research interests include exploring career development concerns with diverse populations and extending the application of theories, such as cognitive information processing (CIP), to military veterans, student athletes, first generation students, and students with

disabilities. Mary will continue working with the college student population during her APA accredited internship with Texas State University's Counseling Center in San Marcos, TX.