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The Positive Functioning of Post-9/11 Student Service Members/Veterans
as a Predictor of Academic Performance

By

Eugenia Liberman Weiss

Claremont Graduate University
2021

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Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Eugenia Liberman Weiss as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Education with a concentration in Policy, Evaluation and Reform.

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Abstract

The Positive Functioning of Post-9/11 Student Service Members/Veterans
as a Predictor of Academic Performance

By
Eugenia Liberman Weiss

Claremont Graduate University: 2021

There is a dearth of empirical evidence on post-9/11 student veterans and what makes them successful in their transition from military service to postsecondary education. This study primarily examined post-9/11 student service members'/veterans' (SSM/Vs) positive functioning (i.e., the building blocks of well-being) as a predictor of their academic performance. Positive psychology through Seligman's (2010) PERMA model and Ecological Systems Theory (Bronfenbrenner, 1993) were used as the guiding theoretical frameworks. An SSM/V sample of convenience ($N = 199$) was derived from seven colleges and universities in three U.S. states.

The following hypotheses were tested mostly using logistic regression: SSM/Vs' positive functioning will be positively related to their academic performance (i.e., self-reported GPA, perceptions of being on time towards program completion, and beliefs of meeting academic goals); SSM/Vs' perceived positive university environment (i.e., social climate) and sense of belonging (i.e., psychological sense of community) will likely be positively related to their academic performance. Additionally, confirmatory factor analysis (CFA) was conducted to assess the factor structure of a well-being measure, Positive Functioning at Work Scale (PF-W, Donaldson 2019; Donaldson & Donaldson, 2021).

The findings from the study indicate that positive functioning is a predictor of SSM/Vs' academic performance and explain up to 18% of the variance. The findings also confirm the original factor structure of the PF-W scale. CFA model suggested a good fit for the data: χ^2

=38.064, $p < 0.009$, $\chi^2/df = 1.903$ CFI=.969, TLI = .957, SRMR =0.045, RMSEA = 0.067.

SSM/Vs' positive perceptions of campus environment and sense of belonging only partially predicted academic performance. The results of this study serve to inform theory, research, and practice for institutions of higher learning specifically on the value of SSM/V well-being on academic performance. Additionally, the study highlights the importance of assessing and promoting well-being in SSM/Vs to facilitate a successful transition in and out of higher education. Future research and application of college/university-wide positive psychology interventions are recommended for further exploration.

Dedication

I dedicate this dissertation to my husband, Adam,
for his continued love, support, and patience through all my years of study.

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I would like to offer my sincere appreciation to all the members of my doctoral committee in the development of my dissertation. Your wisdom and support have enabled me to embark upon this journey and complete this project. I have learned so much from each of you. This entire experience has been amazing because of you all.

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I am very grateful to Dr. Dina Maramba. Your practice expertise and scholarship in the arena of postsecondary education, diversity, and student affairs is what prompted me to focus on

investigating the college student experience and the contributing factors towards success. You are a wonderful instructor, a blend of compassion and intellect.

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Chapter 1: Introduction

Post-9/11 Student Service Members/Veterans are considered one of the largest growing populations of students in postsecondary institutions (Griffin & Gilbert, 2012). Estimates show that each year since the beginning of the United States drawdown of the wars in Iraq and Afghanistan, 200,000 veterans transition out of the military and many start on the path of higher education as a manner of transitioning into civilian life (Hunter-Johnson, 2020; Monster & Military.com, 2016). While the exact number of SSM/Vs that transition into institutions of higher learning (IHL's) is unknown (given that the only figures tracked have to do with the utilization of the GI Bill, which will be discussed later), the transition or reintegration from military to civilian life in terms of postsecondary education, employment, and community can be challenging, especially for those SSM/Vs who have served in the Middle East since the terrorist attacks on U.S. soil on September 11, 2001 (Smith-Osborne, 2019). The U.S. military involvement in Iraq and Afghanistan has been substantially different from wars fought during previous generations. These differences include multiple and longer deployments, lengthy as well as repeated family separations (Lester et al., 2010), undefined front lines leading to increased combat exposure that results in physical injuries and mental health concerns (Hoge et al., 2004). Service-connected conditions and disabilities from these conflicts include traumatic brain injuries (TBIs), posttraumatic stress disorder (PTSD) (Cifu et al., 2013; Higgins et al., 2014), and/or musculoskeletal injuries (Haskell et al., 2012) to name a few. All these conditions result in the potential for functional limitations in veterans (Wilmoth et al., 2011). Additionally, a study of 1,292 veterans receiving services at the VA found that 62% of veterans in the sample reported having perceptions of reintegration challenges for several years beyond the initial transition period from military to civilian life (Sayer et al., 2015).

Although research on this student population is considered in its infancy (Phillips & Lincoln, 2017), a few studies that were mostly qualitative have shown that in adjusting to college, SSM/Vs have reported the following: feeling isolated, experiencing psychological distress (e.g., suffering from anxiety, depression, symptoms of PTSD, and suicide ideation); having physical injuries and perceiving a sense of alienation on campus (for those with combat exposure); as well as having concerns with the lack of structure in college settings as compared to the military (Barry et al., 2014; Elliot et al., 2011; Rudd et al., 2011). Additionally, there are mixed findings and reviews on SSM/Vs' academic outcomes. A recent systematic review indicated that SSM/Vs were experiencing less academic success than their nonveteran counterparts (Borsari et al., 2017), while a large study from Student Veterans of America (SVA) found that SSM/Vs' academic outcomes were comparable to those of nonveteran students (Cate et al., 2014, 2017). The 2019 American Community Survey (U.S. Census Bureau, 2019) on educational attainment for civilian men and women aged 25 and over compared veterans to nonveterans and showed that 37.5% of veterans had some college or an associate's degree in comparison to 27.8% of nonveterans. However, veterans were slightly underrepresented in holding a bachelor's degree or higher (29.5% versus 33.4% of nonveterans). The census statistics must be interpreted with caution as the sample did not reflect service members that were on active duty, and it was unclear if those in the National Guard or Reserves were included in the data. Although many questions remain regarding retention and graduation rates, experts would concur that in general there has been a dearth of empirical evidence on SSM/Vs, that tracking systems are not well-established, and studies on completion rates have tended to demonstrate some methodological challenges. Additionally, there has been little to no data on the effectiveness of campus-based programs in support of SSM/Vs. In a recent systematic review of

the literature on SSM/Vs the authors noted: “Perhaps the most troubling theme to emerge from the peer-reviewed and gray literature is the absence of systematic implementation and evaluation of any programs designed to help the SSM/V population” (Borsari et al., 2017, p. 171).

The current study aimed to add knowledge to the field of higher education for SSM/Vs through a quantitative, non-experimental design. The study examined SSM/Vs at seven institutions of higher learning (two community colleges, one private 4-year university, three public 4-year universities, one public 2-year university [non-community college]) located in urban areas of three U.S. states (Washington, Texas, and California). The primary variables explored were SSM/Vs’ positive functioning, perceptions of positive college/university environment and sense of belonging on academic performance. The study served to test predictions of the relationships between these variables. For example, positive functioning in SSM/Vs as measured by a validated instrument (e.g., Positive Functioning at Work scale [PF-W]; Donaldson, 2019; Donaldson & Donaldson, 2021) would predict positive academic performance (as assessed through self-reported GPA, perceptions about being on time towards program completion, and beliefs about meeting academic goals) for this sample of SSM/Vs. Perceptions of positive college/university environment and SSM/Vs’ sense of college/university belonging were also examined as predictors of academic performance. The study also explored demographic control variables, including age and gender, based on previous findings from the literature that point to the relevance of such variables.

Two theories informed the study—Well-Being Theory from positive psychology as posited by Seligman (2011) and Ecological Systems Theory (Bronfenbrenner, 1993). Additionally, the study was grounded in the *8 Keys to Veterans’ Success*, an initiative espoused in 2013 by the U.S. Departments of Education and Veterans Affairs (VA) that was introduced by

the Obama administration to “create a culture of trust and connectedness across the campus community to promote well-being and success for veterans” (U.S. Department of Education, n.d., para. 2). The colleges/universities in this sample all self-designated as being engaged in the initiative and identified themselves as “military friendly” (i.e., “colleges that embrace practices that recognize the unique needs and characteristics of student-veterans”) (Heineman, 2014, p. 148).

The study is grounded in positive psychology through the five building blocks of Well-Being Theory: positive emotions, positive engagement, positive relationships, positive meaning, and positive accomplishment (PERMA) as originally proposed by Seligman (2011); with four added building blocks (positive physical health, positive mindset, positive physical environment, and positive economic security, i.e., PERMA + 4) as put forth by Donaldson (2019) and Donaldson and Donaldson (2021) through their PF-W scale. Please see Figure 1. The building block of positive physical environment* was not utilized in this study.

Figure 1

Building Blocks of Well-Being (PERMA +4)

Using a well-being framework (and thereby a strengths-based approach, Saleebey, 1997), rather than the traditional deficit-based approach often used to study this student population, highlights the individual positive functioning qualities of SSM/Vs. The study also used Ecological Systems Theory (Bronfenbrenner, 1993) to consider the SSM/Vs' perceptions of the contextual and interacting individual and institutional elements that could influence their academic performance. Ecosystems as applied to human communities have been defined as interdependent networks, as Capra (1996) eloquently noted:

All members of an ecological community are interconnected in a vast and intricate networks of relationships, the web of life. They derive their essential properties and, in fact, their very existence from their relationships to other things. Interdependence-the mutual dependence of all life processes on one another- is the nature of all ecological relationships... The success of the whole community depends on the success of its individual members, while the success of each member depends on the success of the community as a whole. (p. 298)

Finally, the study also aimed to validate the PF-W scale (Donaldson, 2019; Donaldson & Donaldson, 2021) through CFA. The PF-W was originally designed to measure workplace and employee positive functioning and based on the *PERMA-Profiler* (Butler & Kern, 2016), which has been found to be a reliable measure of well-being in SSM/Vs (Umucu et al., 2018). Additionally, well-being has been found to be a significant predictor of academic achievement in college students (Coffey et al., 2016). The use of a validated instrument such as the PF-W scale to measure SSM/Vs' positive functioning would be a helpful resource for institutions of higher learning (IHLs) to assess their SSM/Vs and intervene as necessary and/or find ways to bolster SSM/Vs' existing positive functioning.

Study Assumptions

There were several assumptions made in formulating this study. First, that many post-9/11 SSM/Vs transition from the military to civilian life through IHLs, thus postsecondary education is a “transitional mechanism” (Semer & Harmering, 2015, p. 32). Second, positive functioning (well-being) and perceptions of positive college/university environment, along with a sense of belonging, are important areas to study in successful SSM/V academic performance and reintegration into civilian society. Third, SSM/Vs are nontraditional students with world views and life experiences that are shaped by their military service and are often not well understood by IHLs, which potentially presents issues of inequity in their educational experiences and possibly in their academic outcomes. Fourth, educational outcomes for SSM/Vs are the result of multidimensional forces and should be approached through an ecological or systems perspective. Fifth, SSM/Vs have unique strengths; as such, studies should focus on how positive functioning contributes to their success rather than solely examining deficits.

Lastly, a study such as this one could potentially fill some of the empirical research gaps regarding this generally understudied, nontraditional student population. The hope is to inform IHLs of the various issues related to SSM/Vs to guide evidence-based policy and practice, and to ensure these students' positive academic outcomes and successful transitions from military to civilian life.

Background

Estimates show that since 9/11, one million veterans and their family members have used the GI Bill benefit program to help financially support their postsecondary education (U.S. Department of Veterans Affairs, 2015; U.S. Department of Veterans Affairs, n.d.-a). The current GI Bill benefits (both the Montgomery GI Bill [MGIB] and primarily the post-9/11 version of the GI Bill) have been touted as “the largest increase in educational benefits for veterans since the 1940s,” which this has translated into veterans enrolling into IHLs (Griffin & Gilbert, 2012, p. 5). Although the GI Bill and its various iterations provide tuition assistance/coverage for schooling or vocational training and monthly housing allowance among other benefits, SSM/V's eligibility for this government benefit does not by itself guarantee student persistence or success (i.e., degree completion) (Vacchi & Berger, 2014). Griffin and Gilbert (2012) asserted that while an increase in SSM/V enrollment is noteworthy since the newest iteration of the GI Bill (post-9/11), effective August 1, 2009, “recent reports, news articles and statements from government officials point out that veterans are now more likely to leave college with significant debts instead of degrees” (p. 5). Furthermore, Cate (2014) argued that federal databases and national surveys have historically failed to accurately identify SSM/Vs and that there has been a lack of methodological rigor associated with evaluating postsecondary outcomes for this population (including the possibility of response bias and sampling errors). The data on SSM/V retention

and success rates have been mixed and some would argue inconclusive. Not only has there been a lack of consistent tracking of persistence and retention of SSM/Vs, there has also been a dearth of empirical research on this population in general, particularly quantitative studies. As previously mentioned, it is an area in higher education that is considered in a state of infancy (Phillips & Lincoln, 2017). Phillips and Lincoln (2017) noted that “as veterans continue to enroll in institutions of higher education, researchers must explore new ways of *knowing* student veterans” (p. 656).

Additionally, today’s SSM/Vs are classified as nontraditional students. For instance, according to the Postsecondary National Policy Institute (PNPI, 2019), as of 2016, only 15% of SSM/Vs were traditionally aged college students (18–23), with the majority falling in the 24–40 age range and almost half having children and being married (47%). As far as ethnic/racial composition, for the year 2014, 63% of enrolled SSM/Vs were White, 17% identified as Black, 14% identified as Hispanic, 6% identified as other or multicultural (PNPI, 2019). Furthermore, SSM/Vs bring with them the indoctrination of military culture as they transition from military service to IHLs (American Council of Education [ACE], 2009), which also sets them apart from other nontraditional students. Military culture encompasses how military members view their role in life and is comprised of the values, beliefs, traditions, norms, perceptions, and behaviors that govern members’ ideologies, communication patterns, and interpersonal interactions. Military culture is associated with a high level of unit cohesion (i.e., teamwork) in a highly structured environment that is uniquely different from the civilian world (Exum et al., 2011). By contrast, higher education has been described as a much less structured environment than the military, in other words, an “organized anarchy” (Cohen et al., 1972 as cited in Vacchi & Berger, 2014, p. 123). According to Mikelson and Saunders (2013), the SSM/V transition from military

culture and identity to a student role may be challenging for some, which will be further addressed in the next chapter.

Statement of the Problem

IHLs may not be generally equipped to provide culturally responsive supports to SSMVs, particularly to those who are experiencing challenges related to transition from combat zone experience and the potentially traumatic effects of war (Carlson et al., 2011; Esqueda, De Pedro & Atuel, 2015). Holloway (2009) stated that although the influx of SSM/Vs into IHLs after conflict or war is not a new trend, the number of students from the U.S. conflicts in Iraq and Afghanistan that are dealing with “unprecedented concerns as they adjust to the collegiate environment and cope with war-time stress and/or reverse culture shock” (p. 11) The current population of SSM/Vs appears to be experiencing some challenges with the transition into college life (Sullivan et al., 2019; Vacchi & Berger, 2014). For instance, when compared to their nonveteran civilian counterparts, SSM/Vs tend to engage less with peers and campus life, report feeling different from nonveteran peers, and report lower GPAs and less support from college/university programs (Durdella & Kim, 2012; Kim & Cole, 2013; Livingston, 2009). According to the American College Health Association (2013), SSM/Vs have higher reported rates of PTSD and depression, both at 46%, and a suicide ideation rate of 24%, compared to nonveteran civilian peers that have reported rates of depression at 11% and 8% for suicide ideation. PTSD in nonveteran college students has been estimated at 8–9% (Read et al., 2011; Smyth et al., 2008).

Foundational Theories

Positive psychology, specifically the PERMA building blocks of well-being (Seligman, 2011), is one of the principal theories behind this study. PERMA allows us to understand the

elements involved in human positive functioning (i.e., well-being), for getting the most out of life, and looking for individual strengths rather than focusing on individual deficits. On the other hand, Ecological Systems Theory (Bronfenbrenner, 1993) allows for an examination of the varied systems-types of influences or contextual factors on the individual student service member/veteran (i.e., the environment, the IHL, relationships, culture, etc.) and how this impacts an individual. The interactions between systems could contribute to the SSM/Vs' college/university experience and academic performance. Vacchi and Berger (2014) applied Ecological Systems Theory to understanding SSM/Vs through each of the ecological levels. The present study both adopted and adapted Bronfenbrenner's (1993) and Vacchi and Berger's (2014) hypothetical models in the following manner. The individual includes the SSM/V (their characteristics such as age and gender) and their positive functioning, positive perceptions of the college/university environment and sense of belonging. The microsystem includes the SSM/Vs' employment and family-related influences and the mesosystem includes the interactions between microsystems. The exosystem involves the IHL, its self-designation of military friendliness, and the processes for assisting SSM/Vs to navigate the Post-9/11 GI Bill and its predecessor, the MGIB, as well as the other educational benefits. For example, the Yellow Ribbon Program through the VA, where the VA helps fund additional tuition and fee expenses associated with private IHLs and the institutions contribute matching funds as long as the funds do not exceed 50% of the difference from public in-state tuition and fees (U.S. Department of Veterans Affairs, n.d.-b). Other benefits such as Vocational Rehabilitation again through the VA for those with service-connected disabilities and various institutional policies and practices that impact SSM/Vs (e.g., credit for military service, course credits earned through the military, priority enrollment and flexible policies surrounding leave of absences due to military service demands, among

others). The macrosystem component includes Veterans Benefits Administration (VBA), that is, macro-level policies with regards to educational benefits, military culture, and its intersection with civilian culture as well as its interaction with the exosystem. Lastly, the chronosystem involves the socio-historical time elements and unique components of the post-9/11 service era and its influence on the macrosystem and therefore the impact on all systems. Figure 2 presents the conceptual framework for understanding SSM/Vs through the lens of Ecological Systems Theory.

Figure 2

Conceptual Application of Ecological Systems Theory

Significance of the Study

Little is known from an empirical point of view about how to ensure that SSM/Vs are successful in their transition from military service into IHLs. We also do not know about SSM/Vs who are already successful in their academic outcomes and what makes them so. What we do know is that SSM/Vs often face challenges as they transition out of the military and into civilian life including into IHLs. These can include the “military-civilian gap” (lack of understanding between military culture and civilian college/university culture) (e.g., Downs & Murtazashvili, 2012); coping with combat exposure and resulting injuries (e.g., Tanielian & Jaycox, 2008); having financial concerns associated with the utilization of educational benefits (e.g., Griffin & Gilbert, 2012); unemployment (e.g., Molina et al., 2015); the inability to obtain credit transfers for military training and service (e.g., Griffin & Gilbert, 2012); family reintegration issues (e.g., Johnson & Kestler, 2013); the impact of military sexual trauma (e.g., Rolbiecki et al., 2015); and the potential trials faced by subgroups of SSM/Vs that identify as sexual minorities (e.g., Pelts et al., 2015) or those that have intersecting social/ethnic/gender/military identities. Research on SSM/Vs’ positive functioning can serve to inform the design of institutional interventions based on SSM/Vs’ well-being and personal strengths, along with the potential identification of SSM/Vs’ perceptions of institutional barriers or facilitators (Norman et al., 2015), consequently informing evidence-driven policies and practices. Additionally, by validating the PF-W scale (Donaldson, 2019; Donaldson & Donaldson, 2021), IHLs would have a useful tool to measure SSM/Vs’ well-being and meet their needs towards academic success. The ultimate responsibility of postsecondary educational institutions, and society is to make certain that SSM/Vs have the supports necessary to lead healthy and productive lives as they reintegrate into IHLs and into the civilian world. In fact,

this is the “sacred covenant” between our nation and our veterans (an all-volunteer force) as expressed by Scurfield (2006; as cited in Zacchea, 2013) in the following quote:

American citizens who have taken up arms to support and defend the Constitution of the United States against all enemies, foreign and domestic, deserve to be distinguished from American citizens who have not sworn the oath and laced up the boots in the form of a social contract that guarantees reintegration opportunities, healthcare, benefits, and compensation not necessarily available to non-serving citizens. (p. 30)

Overview of the Methods

This study is a multi-institutional investigation of a sample of SSM/Vs and their perceived positive functioning and academic performance. The study also explores the role of perceived institutional factors, such as SSM/Vs’ sense of college/university belonging (i.e., psychological sense of community) and perceptions of positive college/university environment (i.e., social climate). The research additionally sought to test hypotheses regarding the role of positive functioning as a predictor of positive academic performance (i.e., self-reported GPA, perceptions about being on time towards program completion, and beliefs about meeting academic goals) in this sample. SSM/Vs’ positive perceptions of college/university environment and sense of belonging were also predicted to influence academic performance. SSM/Vs’ age and gender were used as control variables. Gender differences were an important consideration given the statistics provided by the VA (2015) showing that in terms of degree completion, female veterans tend to outperform their male veteran counterparts for all ages combined and when compared to nonveteran females. Age was also considered in this present study as older veterans have tended to outperform nonveterans in degree attainment (VA, 2015), but little data is available on age differences and academic performance in SSM/Vs. Based on the literature

review and what is currently understood about SSM/Vs, this study posits various hypotheses that will be further described in Chapter 3.

This study uses a cross-sectional quantitative survey research design, carried out through an electronic survey using Qualtrics. The SSM/V sample was of convenience from a total of seven colleges and universities located in urban areas of the U.S. states of Washington, Texas, and California. The colleges/universities were known to the researcher. Additionally, the IHLs advertised on their websites that they were “military friendly.” This sample (N = 199) was comprised of SSM/Vs from public, private, 4-year IHLs and community colleges. The eligibility to participate was that SSM/Vs had to be at least 18 years of age, currently enrolled and identify as post-9/11 SSM/Vs. The SSM/Vs were mostly recruited through directors/coordinators of campus-based VRCs, a few leaders of SSM/Vs campus-based student organizations, and/or faculty members having SSMVs in their respective programs.

This investigator created a survey including demographic and military background questions and used the PF-W scale developed by Donaldson to measure post-9/11 SSM/Vs’ positive functioning (2019; Donaldson & Donaldson, 2021). In the present study, SSM/V academic performance was measured using several items created by this investigator and informed by the literature.

The study included post hoc analyses that were performed on institution type predicting academic performance that yielded some mixed and inconclusive results and combat experience was also examined on a post hoc basis to see if combat would predict academic performance. Combat zone experience was not found to contribute to any of the predictive models in this sample of SSM/Vs.

Limitations

There are several limitations to this study. First, SSM/Vs are being drawn from a convenient sampling approach (i.e., non-probability sample). Thus, the ability to generalize any findings from this study to other SSM/Vs in other postsecondary educational programs is greatly minimized. Second, this is a cross-sectional survey study and does not examine the changes that can occur over time as a longitudinal study would. SSM/Vs are in different phases of transition and individual developmental growth. Therefore, this study will only capture a moment in time and not their educational or overall transition trajectory. Third, the study relies on student self-report, which is not always trustworthy in terms of accurate recollection and respondents desiring to give favorable answers (i.e., social desirability). Lastly, the study took place during the inception and continuation of the novel corona virus (COVID-19) and it affected recruitment of study participants and the SSM/Vs had to report on their positive functioning before COVID-19, thus the retrospective nature of the study also provides inherent limitations. However, despite limitations, the study offers a quantitative approach to examining SSM/Vs through a positive psychology lens towards the contribution of knowledge in the field of higher education and serves to inform as well as guide future research.

The next chapter provides a review of literature with regards to SSM/Vs and key concepts that lay the foundation for the current study.

Key Terms and Definitions

“Military friendly” or “veteran friendly” – These terms are used interchangeably in the literature and in this study. While there are various definitions, one that captures the gist of the concept as it pertains here is: “A [military-] veteran-friendly campus identifies and removes barriers to the educational goals of veterans, creates a smooth transition from military life to college life, provides information to veterans about available benefits and services, creates campus awareness of the student veteran populations, and creates proactive support programs for student veterans based on their needs.” (Vacchi, 2011; as cited in Vacchi & Berger, 2014, p. 125).

Operation Enduring Freedom (OEF) – A military operational term that represents the U.S. military involvement in Afghanistan (2001–2014).

Operation Iraqi Freedom (OIF) – A military operational term that represents the U.S. military involvement in Iraq (2003–2011).

Operation New Dawn (OND) – A military operational term that represents the U.S. military involvement in Iraq (2010–2011).

Operation Inherent Resolve (OIR) – A military operational term that represents the U.S. military involvement in Iraq, Syria, and Libya (2018 to present).

Post-9/11 Student Service Member/Veteran (Post-9/11 SSM/V) – This is a term used to refer to those SSM/Vs having served in the U.S. military after the September 11, 2001, terrorist attacks on the U.S.

Student Persistence/Retention – These terms are being used interchangeably to represent those students that are in progress toward or have completed their postsecondary degree/certificate.

Student Service Member/Veteran (SSM/V) – In this study, a broad and inclusive definition of the term is being applied: “a student who is a current or former member of the active duty Military, the National Guard, or Reserves regardless of deployment status, combat experience, or legal status as a veteran” (Vacchi, 2012, p. 17).

Transition – A process of change; for service members and veterans it “entails moving from military culture to the civilian culture, producing changes in relationships, assumptions, work context, and personal and social identity” (Castro & Kintzle, 2014, p. 4).

Reintegration – The term is being used interchangeably with transition in this study (as it is often done in the literature). However, some researchers distinguish between a veteran resuming a civilian role after a deployment (post-deployment) versus resuming a civilian role after exiting military service, acknowledging that these reintegration experiences may be different (Elnitsky et al., 2017).

Veteran – As defined by the United States Department of Veterans Affairs (VA), a veteran is “a person who served in the active military, naval, or air service, and who was discharged or released therefrom under conditions other than dishonorable” (VA, 2015, p. 15).

Veteran Resource Center (VRC) or Office of Student Veteran Services – A dedicated office on college campuses to serve SSM/Vs. Typically, a VRC has a VA-certifying official to assist students with the processing of their education benefits, provide resources/services/programs, and organize events geared towards SSM/Vs.

Chapter 2: Literature Review

This chapter provides an extant literature review on post-9/11 student service members/veterans. First, the author introduces positive psychology, through the concepts of positive functioning or Well-Being Theory (Seligman, 2011), as one of the driving and foundational theories behind the study. Second, Ecological Systems Theory (Bronfenbrenner, 1993) and its application to the SSM/V population is reviewed. Third, statistics on SSM/Vs' rates of college/university enrollment, retention, and completion are provided. Fourth, because SSM/Vs are nontraditional students, the review covers various transition theories to provide a framework for understanding the SSM/V shift from military service to the college campus as being multidimensional rather than linear. The chapter also explores the role of military identity and sense of belonging. Fifth, SSM/Vs' psychosocial concerns and the institutional factors that can contribute to these concerns are described. Finally, the author discusses the designation of the moniker "military- or veteran-friendly" college/university and the lack of systematic empirical research on the effectiveness of targeted programs for SSM/Vs.

The next section provides background into positive psychology, namely Seligman's (2011) Well-Being Theory along with the Ecological Systems Theory (Bronfenbrenner, 1993) and their application to SSM/Vs.

Positive Psychology

Psychologists Seligman and Csikszentmihalyi (2000) made a call to action for the profession to engage in the science of positive psychology. They argued that psychology had become a field that was driven by a disease model of human functioning; instead of focusing on problems and pathologies, they argued that psychologists should be learning about and building upon human strengths. Seligman and Csikszentmihalyi (2000) noted that if we understood the factors that contribute to well-being or human thriving (flourishing), then we could build upon

those positive qualities to improve the quality of human life. Furthermore, the authors noted that flourishing cannot be studied in isolation from social and cultural contexts. In a succinct and yet comprehensive manner, Gable and Haidt (2005) defined positive psychology as “the study of the conditions and processes that contribute to flourishing or optimal functioning of people, groups, and institutions” (p. 104). The term optimal functioning refers to individuals reaching their full human potential (i.e., flourishing), drawing from Well-Being Theory under the field of positive psychology and linked to the juxtaposition of the hedonic and eudemonic characteristics (Butler & Kern, 2016; Diener, 2000; Diener et al., 2010; Seligman, 2011) which will be described in the next section of this chapter. Gable and Haidt (2005) went on to say that there has been an imbalance in the field of psychology in that “the science of psychology has made great strides in understanding what goes wrong in individuals, families, groups, and institutions, but these advances have come at the cost of understanding what is right with people” (p. 105). In a systematic review, the most studied and cited topics in positive psychology included a wide range of constructs that were related not only to subjective well-being, happiness, and positive traits, but also to “meaning, purpose, character strengths, values, positive relationships, social support, gratitude, spirituality, self-esteem, and self-efficacy” (Ackerman et al., 2018, p. 17). The field of positive psychology has been touted as capturing the complexity of the human experience and providing a way to not only lessen human suffering, but also understand it (Gable & Haidt, 2005).

Finally, Seligman and Csikszentmihalyi (2000) posited that positive psychology is focused on the following dimensions of the human experience: at the subjective individual level, i.e., positive subject states (e.g., positive emotion); at the individual level, i.e., positive traits (e.g., behavioral patterns over time); and at the societal level, i.e., positive institutions (e.g.,

healthy families and work environments). Compton and Hoffman (2020) reiterated that positive psychology, as it was conceived by Seligman and Csikszentmihalyi (2000), is a scientific study of the biological, personal, relational, institutional, cultural, and global aspects of positive human functioning.

Well-Being Theory

Positive psychology espouses two separate and overlying conceptual views of well-being. The hedonic perspective considers subjective well-being, i.e., an individual's perception of the experience of pleasure or happiness (Kahneman et al., 1999; Ryan & Deci, 2001), while the eudemonic view considers psychological well-being, i.e., the belief that an individual's life activities are congruent with his or her values (Waterman, 1993). Seligman (2011) argued that well-being as a foundational theory under positive psychology combines the hedonic and eudemonic perspectives and is a construct of five measurable elements (or pillars): **P**ositive emotion, positive **E**ngagement, positive **R**elationships, positive **M**eaning, and positive **A**ccomplishment, which he termed as the PERMA model. Furthermore, each element contributes to the multi-dimensional construct of well-being. Seligman defined each of the pillars in the following manner: Positive emotion involves an individual's feelings of joy and happiness; positive engagement refers to an individual being focused and absorbed in an activity (i.e., "flow"); positive relationship has to do with an individual feeling cared for by others and having mutually satisfying close relationships; positive meaning involves an individual having a sense of purpose in life deriving from and viewed as a meaning greater than the self; and positive accomplishment refers to an individual having a sense of striving for achievement (Seligman, 2011). Seligman (2008) had proposed an additional building block (pillar), which he termed as physical health, which is beyond the absence of disease but rather refers to an individual's

perceived health assets (comprised of biological, functional, and psychological assets). This building block was later translated into the PERMA-H Well-Being Survey by Butler and Kern (2016). More recently, Donaldson (2019) and Donaldson and Donaldson (2021) added physical health and several more building blocks, such as positive mindset, positive economic security, and positive environment to the original well-being model to make the PERMA + 4. An exploratory factor analysis (EFA) was conducted by Donaldson (2019) who found that the Employee Positive Functioning scale (EPF also referred to as the PF-W) had nine factors that fit the hypothesized model (PERMA + 4). Factor 1, positive emotion, is comprised of three items, including “I feel joy in a typical day.” Factor 2, positive engagement, is comprised of three items, including “I typically become absorbed while I am working on something that challenges my abilities.” Factor 3, positive relationships, is comprised of seven items. An example includes “I can receive support from loved ones if I need it.” Factor 4 is positive meaning and is comprised of three items, e.g., “My life is meaningful.” Factor 5 is positive accomplishment, consisting of three items, including “I set goals that help me live my best life.” Factor 6 is positive mindset, comprised of three items, e.g., “I have a bright future.” Factor 7 is positive physical health comprised of four items, including “I typically feel physically healthy” and “I feel in control of my physical health.” Factor 8 is positive economic security, which comprises three items, e.g., “I am comfortable with my current income” and “In the event of a financial emergency, I have adequate savings.” Factor 9 is positive physical work environment, with three items having to do with access to natural light and nature, however, it was not used in the present study.

Donaldson (2019) also reported excellent reliability estimates for the entire scale (e.g., Cronbach alpha of .94), with acceptable to excellent reliabilities for each of the subscales. For

example, “positive emotions ($\alpha = .93$), positive engagement ($\alpha = .88$), positive relationships ($\alpha = .90$), positive meaning ($\alpha = .91$), positive accomplishment ($\alpha = .81$), positive mindset ($\alpha = .86$), positive physical health ($\alpha = .85$), positive economic security ($\alpha = .84$), and positive physical work environment ($\alpha = .76$)” (p. 62).

The PERMA model (and the PERMA-Profiler, the measure) has been examined and empirically evaluated in college students and found to be associated with positive academic outcomes such as college life adjustment, achievement, and life satisfaction (Butler & Kern, 2016; Coffey et al. 2016; Tansey et al., 2018). It has been specifically validated with SSM/Vs (Umucu et al., 2018) and found to be a reliable and valid multidimensional measure of SSM/V well-being. Additionally, a congruent yet distinct measure of the PERMA-Profiler (Butler & Kern, 2016) had been developed by Schreiner (2012) on college student thriving: the Thriving Quotient derived from flourishing (Keyes, 2003; Seligman, 2011) and psychosocial factors associated with college student retention (Bean & Eaton, 2000). According to Schreiner (2012, 2015), this measure underwent confirmatory factor analysis and is based on latent variables that are partially derived from Seligman’s PERMA and comprised of engaged learning (similar to Seligman’s engagement), academic determination (similar to Seligman’s accomplishment), positive perspective (similar to Seligman’s positive emotion), and social connectedness (similar to Seligman’s positive relationship).

Positive Education

Seligman and colleagues (2009) argued and substantiated through prior scientific findings that “more well-being is synergistic with better learning” (p. 294). Having positive psychology curricula and “student-centered policies aimed at boosting well-being that involve schools, communities and families” (Lopez & Calderon, 2011, pp. 124-125), also known as positive

education, would promote student engagement in learning and in achievement besides resulting in other positive outcomes (Seligman et al., 2009). Positive education is a growing sub-field of positive psychology and is being applied in elementary and secondary schools around the world (Seligman & Adler, 2018); embracing the notion that well-being is malleable (Sin & Lyubormirsky, 2009). Mental health promotion in schools through strengths enhancement and increasing positive states such as happiness, optimism, kindness, and meaning through school-based activities/curricula is according to Allen et al. (2017) the second leading goal of schools around the world after academic motivation. Waters and Loton (2019) defined positive education in the following manner: “At its core, positive education is an applied science, meaning much of the knowledge is based on the praxis of wellbeing theories, applied in the form of interventions, to naturalistic, school-based settings” (p. 3). The authors presented an evidenced-informed meta-framework based on a large scale bibliometric analysis combined with empirical research for investigators and practitioners to use in primary and secondary school settings in making decisions with regards to positive psychology interventions (PPIs) (Waters & Loton, 2019). The authors identified what they termed as the “six higher-order pathways” or overarching pathways towards student well-being (i.e., through the SEARCH acronym: S = strengths, E= emotional management, A= attention and awareness, R= relationships, C = coping, and H = habits and goals); where each of these pathways offer associated PPIs that serve to promote well-being and boost academic and school-based outcomes (for a comprehensive review see Waters & Loton, 2019). For example, emotional management is considered a higher-order pathway based on lower-order emotional skill building by using interventions such as body checks, breathing techniques, and gratitude building exercises to name a few (Waters & Loton, 2019). Additionally, through studies in the field of neuroscience, it has been well documented

that emotions (or affect) impact learning (Immordino-Yang & Damasio, 2007; Jensen, 2008).

According to Jensen (2008) on the neuroscience of learning:

Humans are creative and emotional... a more brain-based approach would be to increase classroom engagement, greet all students with a smile, increase social connectedness, and boost involvement in school activities ... policymakers still insist that achieving the highest possible rank in test scores (instead of producing happy, well-adjusted human beings who can think, care about others, and innovate should be the top priority in our school systems) ... Yet human beings are not rats; to account for our unique condition—which includes our propensity to be creative, depressed, oppositional, and motivated as well as to make conscious choices—a bit more sophistication is required. (p. 5)

Waters and Loton (2019) pointed out that Jensen's (2008) work suggested that "academic information is routed through rational and emotional systems in [student] brains, and the emotional climate of a classroom has a significant effect on the degree to which the material taught in class will be committed to memory" (p. 22). Immordino-Yang and Damasio (2007) posited that emotion-related processes are required for the transfer of skills and knowledge from the classroom to real world settings. Based on the benefits of well-being in education, Oades and colleagues (2011) offered a framework for postsecondary institutions to adopt PERMA and PPIs to enhance positive education. Oades et al. (2011) noted that positive psychology is less known or studied in the context of higher education; however, positive learning environments "enable the learner to engage in established curricula in addition to knowledge and skills to develop their own and others' wellbeing" (p. 432). The authors provide examples of PPIs that could be implemented in five aspects of university life: "(1) classroom and formal learning environments, (2) social environments, (3) local community, (4) faculty and administrative work environments,

and (5) residential environments” (Oades et al., 2011, p. 435). The PPIs range from mindfulness practices; cultivating positive emotions using humor, games, and music; the use of individual strengths for group-based assignments; performing campus-wide acts of kindness; community volunteering; use of coaching; and teaching about well-being among other PPIs. Some PPIs have more empirical evidence than others, as this is an area that needs further investigation. However, with regards to building upon student strengths, Schreiner (2015) points out that education theorists have long posited that schools and IHLs should build upon and further strengthen students’ talents in order to promote student success (e.g., Astin, 1985; Binet & Simon, 1916; Chickering, 2006; Dewey, 1938). The use of positive psychology and PPIs in the landscape of IHLs are increasingly emergent in the empirical literature. Based on the thriving construct, Schreiner (2015, 2020) applies positive psychology principles in recommending strategies that can be utilized in IHLs to foster thriving in students and the institution. Schreiner (2015) provides various suggestions, including:

- Faculty development programs that address ways to draw on student self-determination and intrinsic motivation (Ryan & Deci, 2000) with the utilization of active learning strategies (Fredrickson, 2009);
- Positive psychology courses offered in the curricula (Froh & Parks, 2012) or having the concepts infused throughout the college curricula (Fineburg, 2004);
- Academic advising through strengths-based techniques (Seligman et al., 2005);
- Student life programming through service learning (Astin et al., 2000) and student leadership development (Luthens & Avolio, 2003; Schreiner et al., 2009);
- Campus counseling services that include resilience workshops (Hetzl et al., 2005), well-being therapy (Ruini & Fava, 2004), positive psychotherapy (Rashid,

2015; Seligman et al., 2006), and web-based positive psychotherapies (Seligman et al., 2005);

- Positive organizational culture in the college/university fostered through positive organizational behavior (Luthans, 2002; Luthans & Yousseff, 2009), such as sharing information, promoting cooperation, creating a sense of ownership and interdependence, and embracing a moral vision (Park & Peterson, 2003);
- Psychological sense of community being promoted (Sarason, 1974) for students, faculty, and staff alike (Lounsbury & DeNeui, 1995).

Additionally, there are many evidence-based PPIs from the workplace literature (see Donaldson et al., 2019 for a meta-analytic review) and from mental health settings (Bolier et al., 2013) that could be adapted and tested in IHLs.

Positive education is the junction where the application of the tenets of well-being intertwine with the present study on SSM/Vs. Since positive psychology involves the various dimensions of human functioning, the next section will discuss how Ecological Systems Theory can also be applied to understanding SSM/Vs. The juxtaposition of two theories makes for a fuller description of the phenomenon under study.

Ecological Systems Theory

Bronfenbrenner's (1993) Ecological Systems Theory posits that human experience is embedded in an interactive web of environments that create unique developmental outcomes for individuals. The environment from this perspective is represented by the first level, the microsystem (the individual in relation to interpersonal contexts); the second level, the mesosystem (the interactions or processes between microsystems); the third level, the exosystem (the outer context that has an effect on the individual); the fourth level, the macrosystem (the

broader political, economic, social, and cultural contexts that interact with the individual); and the last level, the chronosystem (the environmental influences changing over time). Vacchi (2011, 2013) proposed a framework called the Model for Student Veteran Support that situated Ecological Systems Theory in addressing the multi-layered and systemic influences on the SSM/Vs' college/university experience. Vacchi and Berger (2014) applied the Ecological Systems Theory to understanding the student veteran experience in the following manner: The authors suggested that the microsystem could be characterized as the veterans' life challenges, medical conditions, identity transitions, and issues involving dependents. This level also included student support relationships and participation in student-based organizations. The mesosystem involved the potential impact of the SSM/V being employed while attending college. For instance, having to miss classes for service in the National Guard/Reserve or being on active duty status and having to deploy for months at a time would interrupt the completion of academic requirements. In the exosystem, the college/university's institutional policies, curriculum, financial aid, and the veterans' utilization of the GI Bill, with its regulations and limitations, could have significant effects on the SSM/Vs' educational experience and success. The macrosystem for SSM/Vs, according to Vacchi and Berger (2014), relate to the values and norms that accompany military service and how these may be incongruent with the values/norms of a college/university setting. The authors caution that SSM/Vs should carefully examine those IHLs that advertise being military- or veteran-friendly (more on this in the last part of the chapter). Additionally, the VA and the government regulations on educational benefits could be considered as part of the macrosystem. Finally, the chronosystem had to do with transitions over the life course, with consideration for the era of military service and the time when SSM/Vs attended college. That is, the historical period is considered an influential environmental

component to the SSM/Vs' overall college experience. For example, Vacchi and Berger (2014) noted that SSM/Vs who attended college during the World War II era or during the 1970s (Vietnam) could have very different experiences than post-9/11 SSM/Vs who are currently attending IHLs. Additionally, the authors argued that each college/university has its own historical legacies, particularly with regards to diversity and creating a sense of a welcoming campus environment for different groups.

The next section will outline SSM/Vs and the extant knowledge with regards to the data on their educational trajectories, the tracking systems in higher education and their status as non-traditional students.

Student Veteran Postsecondary Enrollment & Retention

For both student service members/veterans and nonveteran students, achieving a postsecondary education/degree has been associated with well-known indicators of positive life outcomes, such as higher income (Oreopolous & Pentronijevic, 2013), increased job satisfaction (Oreopolous & Salvanes, 2011), and better health (Hout, 2011). Additionally, for SSM/Vs, completing a degree and obtaining gainful, competitive, and meaningful employment demonstrates their successful reintegration into civilian life (Coll & Weiss, 2013). The current systems for tracking SSM/Vs through their educational trajectories, however, are limited and fraught with challenges. SSM/Vs have been defined here and elsewhere as “a student who is a current or former member of the active duty Military, the National Guard, or Reserves regardless of deployment status, combat experience, or legal status as a veteran” (Vacchi, 2012, p. 17). However, this inclusive definition is not applied consistently across campuses or by differing states (or by national data sets as will be explained later). Furthermore, SSM/Vs are a diverse group representing all racial and socioeconomic strata (Armor & Gilroy, 2010) and include

subgroups such as Reserve Forces and veterans that identify as LGBT, to name a few. A report from the National Center for Education Statistics [NCES], illustrated that during the years 2011–2012, there were 1.1 million SSM/Vs enrolled in undergraduate education programs (defined as Title IV postsecondary institutions in 50 states), representing 4.9% of 23.1 million undergraduates (Radford et al., 2016). The data also suggested that 24% of SSM/Vs attended for-profit institutions (two-year colleges and higher) and 37% attended public, two-year institutions, both numbers exceeding nonveteran student population figures. According to the report, online education was also popular with SSM/Vs at 18% for undergraduate studies and 47% for graduate studies—rates that were significantly higher than for their nonveteran counterparts. Other NCES data (2016) comparing SSM/V enrollment since the Post-9/11 GI Bill between two time periods showed that “the number of all military students increased from 914,000 [2007–2008] to 1.1 million [2011–2012]. By military subgroup, the number of veterans enrolled as undergraduates increased from 688,000 to 856,000” (p. 5). And with graduate student enrollment, the same study noted “There was not a statistically significant increase in the total number of all military students enrolled in graduate education between the two time periods. There were changes by military subgroup, however. The number of reservists enrolled in graduate education increased from 8,400 to 18,200” (p. 5).

Holder (2011) examined 10 years of data from the Current Population Survey (CPS) conducted by the U.S. Census Bureau and found that for 2000–2009, a higher percentage of veterans had completed some college than nonveterans, but not a degree; SSM/Vs were found to complete four-year degrees at a 70% lower rate than nonveteran students, and male veterans lagged behind other nonveterans with a bachelor’s degree. Female veterans were the exception, in that they had earned bachelors’ degrees at a higher rate than nonveteran women. According to

Holder (2011), Hispanic veterans were more likely to earn a bachelor's degree than Hispanic nonveterans. No differences were reported for Black veterans and nonveterans in terms of degree attainment. Additionally, over the 10-year span, there was an increase in White non-Hispanic and Hispanic SSM/Vs earning degrees; however, there was no change for Blacks or other non-Hispanic groups.

The intersection of minority status, low-income background, and first-generation student status (typically defined as those students that have parents without a college degree, Choy 2001) have been historically recognized as barriers to access to higher education, leading to poor school readiness and lower postsecondary educational completion (National Center for Public Policy & Education, 2009). While the literature and census data suggest that most veterans (by subgroup) have earned high school diplomas at higher rates than their nonveteran peers (Census, 2019; Grandillo & Magee, 2017), like other first-generation students, they may have limited social capital (Bourdieu, 1984) in terms of opportunities for academic preparation and may additionally face difficulties with transitioning from the military to postsecondary education (Esqueda et al., 2015). Vacchi and Berger (2014) cautioned that the data cited by Holder may not be representative of all SSM/Vs, as the definition of student veterans by the U.S. Census Bureau is limited to those separated from the military (i.e., veterans) and not inclusive of those in active duty and unclear on service in the National Guard or Reserves.

Recent data estimate that SSM/Vs from the conflicts in Iraq and Afghanistan have had low bachelor's degree completion rates and higher dropout and stop-out rates as compared to nonveteran students (Cate, 2013). However, data derived from a study called the Million Records Project (MRP), as the name implies, almost 1 million SSM/Vs who utilized the educational benefits under the MGIB and the Post-9/11 GI Bills during 2002 and 2010 offered a more

positive outlook (Cate, 2014). The MRP represented the first public-private partnership between the VA, the National Student Clearinghouse (NSC), and Student Veterans of America (VSA) that examined SSM/V postsecondary education completion rates. The initial findings of the MRP pilot project, which consisted of a secondary data analysis of VA and NSC records, found that the majority of SSM/Vs in this sample were male, were enrolled in public institutions, were between the ages of 20 and 30, and that 51.7% of them completed a certificate or a two- or four-year degree. No data was provided on race or ethnicity. Although these findings suggested that SSM/Vs may graduate at comparable rates in terms of their nonveteran traditional peers, NCES (2020) noted that for the same year comparison, 59% of students from a national sample graduated with a bachelor's degree. The statistics have been difficult to track, compare, and interpret. Cate (2014) noted that one of the main problems in tracking SSM/V outcomes has been that utilization of the GI Bill (and its various iterations) has been applied as a proxy for enrollment in higher education. However, not all SSM/Vs utilize the GI Bill (e.g., veterans that are not eligible, like those with "other than honorable" discharges), or they underutilize it. Some will delay using the benefit or will interrupt their education (e.g., start and stop attending college due to military service or service-connected injuries, or due to family/work demands), and some attend multiple institutions and will go into various degree or certificate programs and run out of the benefits before actually completing a degree or certificate. These areas are where some of the tracking challenges and problematic methods of data collection have come into play. Cate and colleagues (2017) noted that "national-level data on student veterans have been difficult to collect, analyze, and interpret due to poor collection methods, narrow inclusion criteria, and errors in identifying student veterans" (p. 12). According to the VA (2015), the data has been difficult to break into more "granular elements" (p. 14).

Consequently, Cate and colleagues (2017) conducted a follow-up study to the MRP, titled the National Veteran Education Success Tracker (NVEST). The study provided a clearer focus than the MRP, as it only examined Post-9/11 GI Bill SSM/V beneficiaries, not MGIB, and offered a deeper dive into academic outcomes that included persistence, transfer, and attrition rates and enrollment status (full-time or part-time) versus the MRP, which only looked at higher level outcomes such as completion, time to degree, level of education, and vocational training (Cate et al., 2017). Again, the data for NVEST was derived from VA education benefits and the NSC, this time, from the inception of the Post-9/11 GI Bill, from August 1, 2009, to December 31, 2013, with a subset of 853,111 beneficiaries. Cate and colleagues (2017) recognized that there were limitations in using VA data. Although they included information from the NSC database to obtain more accurate enrollment trends and found a 96.4% match between the two data sets, they nevertheless acknowledged that there is no perfect system or method in place for tracking student veterans. Still the authors argued that the NVEST findings represented the most accurate information that is available today. The most salient findings from NVEST study included a SSM/V success rate of 72% (this percentage is defined as 54% completion of degree or certificate; and 18% persisting i.e., in progress, enrolled between January 1, 2015, and September 1, 2015) and college attrition for this sample was 28% (Cate et al., 2017). Even with military service-related injuries and disabilities (Cate, 2016), SSM/Vs were completing and persisting in their degrees or certificates in comparable rates to other age-related nonveteran peers (Cate et al., 2017). Cate (2014) also found that community colleges have the largest numbers of SSM/Vs since these institutions offer technical certificates and degrees and enable students to transfer to 4-year colleges/universities. Furthermore, although the data on SSM/Vs' academic outcomes at community colleges have been unclear, data on use of the GI Bill suggests

that neither degree attainment nor GPAs for SSM/Vs in community colleges have been as high as for those SSM/Vs enrolled in 4-year institutions (Marcus, 2017; Semer & Harmening, 2015).

Nontraditional Students

There are several definitions of who is considered a nontraditional student. Typically, nontraditional students have been identified as those who meet any one of the following criteria: delayed college entry after high school by one or more years, age 25 and older, single parent, do not hold a high school diploma (instead have a General Education Development/Diploma [GED]), and attend college on a part-time basis (Choy, 2002). SSM/Vs meet many of these nontraditional student characteristics. Additionally, DiRamio and colleagues (2009) argued that military life has provided worldly experiences that have exposed service members to an array of cultures and depth of experience, again differentiating them from their traditional and even nontraditional nonveteran counterparts (O'Herrin, 2011). A study on SSM/Vs found that they are often reluctant to identify as military veterans because they “desire to blend in on campus ... not wanting to call attention to their military service and the fact that they are often much older and more experienced than other undergraduates” (Griffin & Gilbert, 2012, p. 10). Furthermore, the experience of stress or any associated mental health problems (e.g., posttraumatic stress, depression), cognitive impairments (resulting from traumatic brain injuries), or physical disabilities for returning combat veterans can create even greater challenges in terms of adjusting to a college setting (DiRamio et al., 2008). Vacchi and Berger (2014) argued that “almost all veterans face adjustment when they return to American society: for some it is a physical disability; for others, it is simply that they changed during combat or service and need to time to adjust to their new normal. ... adjust to a niche of society that differs greatly from mainstream America: higher education” (p. 112). Much of the literature emphasizes the importance of

addressing veteran transition into higher education and suggests that without a successful transition, many SSM/Vs do not persist toward or attain their degrees; however, data in transition assistance (i.e., campus readiness programs) are limited (Cook & Kim, 2011).

The next section of the chapter synthesizes the various transition theories that attempt to explain how service members shift from military life and reintegrate into civilian life, with an emphasis on how IHL's can act as a vehicle for this transition.

Transition Theories

Transitions in life involve change, whether the change is anticipated or not. Military Transition Theory describes a process for understanding how military service members transition out of the military and into civilian life. This transition (or change in life) “entails moving from military culture to the civilian culture, producing changes in relationships, assumptions, work context, and personal and social identity” (Castro & Kintzle, 2014, p. 4). According to Castro and Kintzle (2014), the theory is based on progressive and interacting phases that involve individual, interpersonal, community, and military organizational aspects that contribute to the trajectory of the process. The first phase is how the individual approaches or prepares for the transition and lays the foundation for the entire transition experience. The second phase is managing the actual transition with myriad factors (individual, interpersonal, community, and military) that can potentially impact how the service member moves from being a military member to becoming a civilian; and the third phase is the assessment of outcomes in terms of an individual reintegrating into civilian society, typically including various aspects of life, such as employment, family, health, community, and experiencing general well-being.

There are several extant theories of student transition that have been proposed for SSM/Vs. However, before examining transition for SSM/Vs, there are general transition theories

within the higher education context that have been well documented. For example, Schlossberg's (1989) Transition Theory for adult students entering college noted that transitions are influenced by student perceptions and the quality of support that is provided during the period of transition. Perceptions of potentially stressful changes and accompanying events being viewed by students as opportunities for growth through positive cognitive appraisals are considered key in successful transition (Schlossberg, 2007). Schreiner (2020) indicates that "Transitions are part of every student's college experience and are pivotal times for students' decisions about their abilities and resources to succeed" (p. 29). The first year of college is particularly critical in student persistence and influencing student attitudes throughout their trajectory in higher education (Astin, 1993). Although there are a number of institutional practices that attempt to support students in their transition into higher education (e.g., first-year orientations, learning communities, service-learning activities, opportunities for cocurricular activities, etc.), about 30% of first-year college students do not persist beyond their first year (ACT, 2018). Schreiner (2020) in synthesizing the literature on successful transitions posits that there are hallmarks to successful transition. For instance, students' perceptions of transition into college and through higher education are viewed as growth opportunities; students use healthy coping mechanisms through their transition process; students believe that they have the support necessary to be successful; and students have access to resources in the form of information, emotional support and other types of assistance (Schreiner, 2020).

As far as transition theories that have been applied to SSM/Vs Faulkner and McGaw (1977) offered three phases of reentry for Vietnam-era veterans that has been applied to modern day student veterans (Holloway, 2009). In this model, veterans *move from the war experience* (i.e., loss of sense of time, self, and others), *move back into the world* (i.e., negotiating military

culture with civilian life, which includes an inability to share the war experience and feeling excluded from others), and *move toward reintegration* into society (i.e., reconstruction of identity, building relationships, and a focus on growth in educational and occupational realms) (Faulkner & McGaw, 1977). Di Ramio and Jarvis (2011) also posited a helpful model that can be applied to SSM/V transition and identity formation through education theories, such as Schlossberg, Lynch, and Chickering's (1989) The Moving In, Moving Through, Moving Out paradigm (p. 57). In this model a student evaluates each point of transition (e.g., the transition into college, being in college, and graduating), including the positive and negative effects, while managing resources/supports and making meaning of each transitional phase. Identity crises can occur during these transition points, and in this model, the student is to engage in self-analysis in order to create an inventory of personal traits, psychological factors, and available social supports to devise healthy coping strategies to modify, control (the meaning of the transition), and manage the associated stressors. Thus, Di Ramio and Jarvis (2011) pointed out that by applying the Schlossberg et al. model, SSM/Vs would need to be approached from a "multidimensional" point of view that includes how they respond to their interpersonal and intrapersonal realms as well as what supports the environment can offer. Vacchi and Berger (2014) argued that an ecological approach (such as the Ecological Systems Theory; Bronfenbrenner, 1993) demonstrates the complexity with which various actors and agents interact with and influence veterans over time and therefore the SSM/V college experience and transition should not be conceptualized as linear (ecosystems will be discussed later in the chapter). However, in line with an ecological systems approach, a mixed-methods study ($N=31$) by Norman et al. (2015) found three overarching themes related to SSM/Vs' perceived personal and systemic barriers and facilitators in their academic transition and achievement: "person

features (e.g., discipline and determination, symptoms, and stressors), institutional structure (i.e., what schools and the VA do that was perceived to help or hinder their success), and policy concerns (i.e., how the structure of the GI Bill affects student veteran school experience)” (p. 701).

Di Ramio and Jarvis (2011) also noted that Tinto’s (1993) model of student departures is another way of framing the SSM/V transition process in higher education. In this education based-model, pre-entry college attributes and intentions are considered, such as social and cultural capital (e.g., family background, socioeconomic status, and prior schooling) as well as skills and abilities. Di Ramio and Jarvis (2011) posited that students who have military experience have added attributes that could become challenges, such as psychological or physical injuries from combat in addition to financial concerns, which have been identified by student veterans as a major obstacle in college transition (despite access to the GI Bill for those that are eligible) (DiRamio et al., 2008). The original model as proposed by education theorist Tinto (1993) posited that academic and social integration in a college setting was paramount to student persistence. However, Tinto’s model has been scrutinized by researchers as lacking empirical support and the fact that it was originally conceptualized for traditional students. For instance, one study noted that academic integration was far more important than social integration for student veteran persistence in a commuter type of college setting (Braxton et al., 1997). This, however, was not found to be the case in residential types of university environments where social integration was associated with greater institutional commitment and student persistence (Braxton et al., 1997). Thus, it is conceivable that the types of institutional settings and their various opportunities for social and academic integration will factor into the complex portrait of SSM/V retention. As previously stated, one of the most-cited challenges

regarding transition from military service to college life involves interpersonal and social acculturation (DiRamio & Jarvis, 2011). Jenner (2017) described this as a shift in social context in which “the military identity is widely known, appreciated, and shared, to a context with few military peers and a preponderance of individuals with little understanding of military culture” (p. 29). The author went on to say, “For student veterans, leaving the military involves reconceptualizing not only what they do, but also who they are and what they believe” (Jenner, 2017, p. 30).

Closely aligned with transition is the notion of role exit. Education theorists Chickering and Schlossberg (2002) defined transition in higher education as an event associated with role disruption. Role Exit Theory, as originally proposed by Ebaugh (1988), is a process by which an individual disengages from a previous role while attempting to adapt to a new role. This is the case with service members who transition out of the military into the civilian world. An individual’s change of role from a military institution to a civilian setting, such as the college environment, can be complex. This has been found to be particularly true for those undergraduate SSM/Vs with combat experience who tend to feel isolated on college campuses (Naphan & Elliot, 2015).

Belonging

The sense of belonging is considered an innate human need (Adler, 1939). Alfred Adler posited that a child’s emotional connection to his or her teacher, to other students, and to the school community is essential for their school success. In school-age students, social acceptance and respectful interpersonal interactions with others is conducive to developing a sense of belonging (Anderman, 2003). In college-age students, Schreiner et al., (2015) found that having a strong psychological sense of community is a significant predictor for thriving in college.

Psychological sense of community (McMillan & Chavis, 1986; Sarason, 1974) involves students' feeling a sense of belonging through their institutional membership; their ability to influence decision-making processes at their respective IHLs; their having a sense of integration and fulfillment as being part of the IHL; and having emotional connection to others through friendships and positive interactions with faculty. Additionally, in Freeman et al.'s (2007) study, adult students' perceptions of being socially accepted by both peers and university staff was considered an important factor in relation to their sense of belonging. Likewise, Osborne's (2014) exploratory qualitative study with undergraduate SSM/Vs revealed that they had a lower sense of belonging on campus in contrast to their nonveteran counterparts; thus, a positive campus climate was an important issue for these students. Their perception of climate included campus characteristics such as "liberal" and "anti-military" (p. 254) and that classroom interactions and discussions with nonveteran peers and faculty accentuated and confirmed these perceptions. There has been evidence that the quality of the student classroom experience is a significant contributing factor to student retention (Tinto, 1997). Furthermore, classroom quality entails the formation of a "cooperative learning community," defined as "the bond among people that moves democratic decision making from negotiations around competing self-interests to a consideration of the common good" (Berman, 1997, p. 136).

The literature has noted that ignorance/insensitivity or lack of appropriate accommodations by postsecondary institutions can negatively impact SSM/V retention and degree attainment (Ellison et al., 2012; Esqueda et al., 2015). Furthermore, feelings of marginalization have been reported by SSM/Vs (Glover-Graf et al., 2010), and lack of integration into campus culture has been associated with lower levels of persistence (Tinto, 1993). As previously mentioned, the National Survey of Student Engagement (2010) found that

SSM/Vs were less engaged with faculty and held perceptions that their campus environments were less supportive as compared to nonveteran peers. Martin (2011) argued that when students are engaged in their campus community, they are also more likely to persist. Vacchi and Berger (2014) noted that numerous variables should be considered, such as academic integration variables associated with faculty and nonveteran peer interactions. Other variables proposed by Vacchi and Berger (2014) include SSM/V identity, social and cognitive development, and the intersection of identities (e.g., student identity in combination with veteran identity and other identities, for example, by disability or gender/race). Additionally, it has been hypothesized that those SSM/Vs with a higher degree of identification with the military may have more difficulties integrating into campus life than those with lower military identification; however, this would need to be empirically verified (Hamrick & Rumann, 2013). In a national survey, SSM/Vs reported that one of the main challenges associated with their transition from the military to higher education involved the social acculturation into college life (McBain et al., 2012). Arminio and colleagues (2015) found in their exploratory case study of SSM/Vs and student affairs staff that SSM/Vs experienced acculturation stress, i.e., “culture shock” or a “clash of cultures” between military culture and higher education. In other words, SSM/Vs “experienced cultural dissonance in their transition from the military to college” (Arminio et al., 2015, p. 42). Glasser et al., (2009) also found through focus groups with SSM/Vs that they were “surprised at their [nonveteran] classmates’ lack of attention, text messaging, giggling and complaining ... and student veterans were put off by political views expressed by their professors ... making opinions sound like facts” (p. 33).

Military Identity

Identity as defined by Burke and Stets (2009) is a “set of meanings that define who one is when one is an occupant of a particular role in society, a member of a particular group, or claims a characteristic that identifies him or her as a unique person” (p. 3). A significant component of military affiliation is the individual identifying with military culture. The military indoctrination process develops in recruits a sense of group loyalty and the group taking precedence over the individual (Exum et al., 2011). More precisely, social identity theory posits that an individual’s self-concept is derived from his or her membership in a social group (or groups), together with the value and emotional significance that the individual attaches to the group(s) (Tajfel & Turner, 1979, 1986). It is often apparent that some veterans, after separating from military service, continue to lead their lives according to a military identity. Identification matters because it is a process by which people define themselves, and this helps to determine attitudes and behaviors and the way they communicate that definition to others (Ashforth & Mael, 1989; Ashforth et al., 2008). Jones (2013), through a qualitative study, concurred with the notion of veterans having a separate identity in settings of higher education, in that “much of military training forces servicemembers into pre-assigned identities that, while valued in the military may have little correlation in their new roles as students in higher education” (p. 1). Furthermore, it has been theorized that transition distress in Iraq and Afghanistan veterans is associated with conflicting identities between military and civilian identities (Smith & True, 2014). Daley (1999) posited that military identity as a construct, while vocational in nature, is like an ethnic identity by being a shared unique experience and having a group-oriented focus. Others have argued that an individual is comprised of intersecting social identities to include family background,

sociocultural conditions, current experiences, and other contextual elements (Jones & McEwen, 2000) that also incorporate meaning making (Abes et al., 2007).

More recently, several authors have pointed out through empirical studies that military identity is a multidimensional construct (Johansen et al., 2013; Lancaster & Hart, 2015; Lancaster et al., 2018). For instance, Johansen et al. (2013) identified three dimensions of identity through a scale to measure military identity in the Norwegian Armed Forces. The dimensions included professionalism (e.g., shared values, attitudes, behaviors), individualism (e.g., self-fulfillment), and idealism (e.g., collectivism, patriotism, and altruism). Lancaster et al., (2018) on a sample of U.S. military members, reported dimensions of a measure of military identity that included identity exploration, commitment, private and public regard for the military, and military as a family, to name a few, and that these domains may be associated with positive, negative, or mixed levels of psychosocial functioning in veterans. Jenner (2017) cautioned that military identity may not just be multidimensional but also intersectional (i.e., people possessing multiple identities, see Burke & Stets, 2009). Jones and McEwen (2000) pointed out that when one thinks of an individual's identity, one should include other social identities within that individual such as gender, race/ethnicity, socioeconomic status, disability, etc. As an example, in 2014, 62% of SSM/Vs were also first-generation students (PNPI, 2019). These intersecting identities with veteran status need further examination (Holloway, 2009; Jenner, 2017). Furthermore, Hammond (2016) suggested through his qualitative study that community college student combat veterans' individual identities became secondary to their military combat identities and this set them apart from nonveteran peers and connected them to other student combat veterans. The author proposed a Combat Veteran Conceptual Identity Model that could be utilized to understand how combat veteran identity plays out in SSM/Vs and

that this would need to be empirically studied (Hammond, 2016). Yet regardless of how one defines SSM/V identity, it is important to keep in mind that not all veterans are alike, much like the cultural competence literature suggested that intra-group variations exist even within a given culture (Ibrahim, 1985). Baron (2014, as cited in Arminio et al., 2015) noted that the variation in experiences of military service members and veterans and SSM/Vs are so great that the use of the label (SSM/V) is only one of convenience and to many SSM/Vs it does not represent who they are as individuals or necessarily capture their time and unique experience of having served in the military.

The next section provides an overview into the unique psychosocial challenges faced by SSM/Vs: including combat exposure and resulting injuries; financial concerns associated with the utilization of educational benefits; unemployment; inability to obtain credit transfers for military training and service; family reintegration issues; the impact of military sexual trauma; and the potential challenges faced by those student veterans that identify as sexual minorities. The section also provides the institutional issues that can influence SSMVs and their success.

Unique Challenges Faced by Student Veterans

As previously noted, the literature suggests institutions of higher education may not be generally equipped to provide culturally responsive supports to SSM/Vs, particularly to those who are experiencing challenges related to transition from combat experience. Pryce et al., (2012) suggested that SSM/Vs with war experiences can feel very different from their nonveteran peers and instructors and, thus, may be unable to relate to them due to social and cognitive dissonance. Teaching approaches in postsecondary education that promote the use of reflection, independent thinking, and freedom may also create a cultural dissonance for SSM/Vs who are accustomed to military culture where expectations are clearly defined within very

structured and disciplined environments (DeSawal, 2013). Additionally, ignorance/insensitivity or lack of appropriate accommodations (Ellison et al., 2012) by postsecondary institutions can negatively impact SSM/V retention and degree attainment (Esqueda et al., 2015). Furthermore, feelings of marginalization have been reported by SSM/Vs (Glover-Graf et al., 2010). Downs and Murtazashvili (2012) noted that there is a “military-civilian gap” or an “understanding gap between civilians and the military within the university” (p. 279). That is, the authors posited that SSM/Vs and nonveteran peers, instructors, and administrators do not seem to understand each other due to cultural differences between military and civilian life. In fact, a survey study at a community college and a 4-year university by Gonzalez and Elliot (2016) showed that when faculty had previous personal experience or contact with the military, their attitudes towards SSM/Vs were more positive, faculty were more likely to help SSM/Vs, and were more likely to discuss military-related matters in the classroom (and with less judgment towards veterans for U.S. foreign military policies) than those faculty members without previous military exposure. Osborne (2014) noted that SSM/Vs may also be susceptible to inaccurate and negative stereotypes based on sensationalized media portrayals that depict veterans as prone to violence and suffering from PTSD.

Military Experiences and Injuries

As previously noted, the most common “signature” or “invisible wounds” (unseen injuries) associated with post-9/11 SSM/Vs include mental health concerns such as PTSD and neurological issues, mostly mild TBIs (Tanielian & Jaycox, 2008). It is worthy to note that because there were no clearly defined front lines, even those service members in support positions (i.e., not necessarily those in formal infantry roles) were vulnerable to injuries. TBIs, particularly the mild type (i.e., concussion) affect high numbers of military personnel; since

2000, the reported number is 352,619 reported cases (Defense & Veterans Brain Injury Center, n.d.), however this number could be higher given that not all mild TBI-related injuries have been reported. Barry et al., (2012) found that PTSD in SSM/Vs was correlated with lower academic performance and represented barriers to college persistence. And cognitive issues, such as difficulty concentrating or memory problems resulting from TBI or PTSD, can interfere with completing course work, and often SSM/Vs will not know about or seek out accommodations (American Council on Education, [ACE], 2011). As previously stated, military service-related injuries have also been implicated in SSM/Vs having lower GPAs than their nonveteran peers (Durdella & Kim, 2012). Additionally, excessive alcohol use in this population has also been associated with mental health disorders (e.g., as a way of coping with PTSD), and alcohol has often been utilized as a general coping mechanism for veterans (Barry et al., 2012; Milliken et al., 2007). The major health concerns reported by SSM/Vs with regards to PTSD and mild TBIs involve insomnia, nightmares, depression, uncontrollable anger, difficulty focusing, and hypervigilance (Kraus & Rattray, 2013). Experiencing mental health symptoms of PTSD and depression have been associated with SSM/Vs reporting feeling uncomfortable in crowded spaces and large classrooms, feeling unfairly judged by others, and contributing to feelings of alienation on campus (Elliot, 2015; Elliot et al., 2011).

The rates of PTSD in the post-9/11 (OEF/OIF/OND) veteran cohort vary from 11% to 20% in a given year, versus 7% to 8% of the general population at some point in a lifetime (See Hoge et al., 2004; U.S. Department of Veterans Affairs, n.d.-c). Other figures have estimated PTSD rates from 12% to 30% (Higgins et al., 2014) and TBI from 10% to 23% (Cifu et al., 2013). Moreover, studies estimate that one out of five veterans suffer from musculoskeletal disorders and accompanying pain (Haskell et al., 2012). In the current cohort of post-9/11

SSM/Vs, PTSD has been estimated to be as high as 46% (Rudd et al., 2011). Another study indicated that SSM/Vs that have had combat experience with related injuries also reported having lower GPAs than their nonveteran peers (Durdella & Kim, 2012). Previous findings have shown that combat veterans with PTSD have experienced verbal learning impairments and problems with attention (Uddo et al., 1993). Additionally, Barry and colleagues (2012) found PTSD in this student population is correlated with lower academic performance and has presented barriers to college persistence. However, a more recent study suggested that poor academic adjustment in SSM/Vs was related specifically to the hyperarousal-related cluster of symptoms of PTSD rather than a full-blown PTSD diagnosis (with the three symptom clusters of avoidance, intrusion, and hypervigilance) (Campbell & Riggs, 2015). Campbell and Riggs (2015) noted that hyperarousal symptoms such as sleep disturbances, concentration problems, and hypervigilance would potentially interfere with studying and sitting in a classroom. This is not to suggest that all combat experiences result in injuries visible or invisible. Yet, although military service members are surviving combat through improvements in body armor, medical advances, and prompt evacuation from battlefields, some are subject to health problems that can impact their general functioning in higher education settings (Church, 2009).

Suicide has been recorded as the second leading cause of death among military personnel (Ramchand et al., 2011), and have exceeded the estimates for the general U.S. population (Bryan et al., 2015). Suicide-related risk factors have been controversial and have yielded mixed results in the literature. For instance, a meta-analysis of 22 published studies found that deployments are associated with suicide-related outcomes, particularly for those exposed to wartime killing or atrocities. Another large retrospective study of 3.9 million service members, however, pointed out that deployment (combat or otherwise) is not associated with suicide (Reger et al., 2015).

Reger and colleagues (2015) found that early military separation (less than four years of service) and a less-than-honorable discharge were risk factors for suicide in the cohort of military personnel who deployed between 2001 and 2007 in support of OEF and OIF. Some veterans will have multiple service-connected disabilities (i.e., polytraumas), such as motor (limb loss) and spinal cord injuries, hearing and vision impairments, and chronic pain (Bilmes, 2007; Glover-Graff et al., 2010). The most recent data on SSM/Vs seeking disability accommodations shows 21% for undergraduates compared with 11% of nonveterans for the years 2011–2012 (U.S. Department of Education, 2016). But other data suggest that SSM/Vs with invisible or non-apparent disabilities that do not require visible prosthetics may not seek such accommodations or campus counseling supports, either because of a reluctance to disclose or a lack of awareness of campus services (Kim & Cole, 2013; Kranke et al., 2013). Moreover, other researchers note that nontraditional students, when compared to their traditional counterparts, tend to underutilize campus services, including those offered by the campus disability office (Gilardi & Guglielmetti, 2016). In a qualitative study by Livingston et al., (2011), SSM/Vs downplayed their veteran status and were less likely to seek campus academic support services. Without proper accommodations and support, these physical health- and mental health-related issues in veterans can negatively impact the classroom setting and student learning, and it has been suggested that their overall postsecondary educational experience may suffer (Kranke et al., 2017).

Educational Benefits

Eligible veterans must apply and enroll in education benefits through the VA. In general terms, the Post-9/11 GI Bill (also called Chapter 33) for veterans that have served on active duty after 9/10/2001, includes coverage of public in-state tuition and fees, housing allowance (amount based on cost of living expenses for school location), and funding for books and supplies (U.S.

Department of Veterans Affairs, n.d.-b). The delay in the disbursement of VA educational benefits, such as the MGIB and the Post-9/11 GI Bill, and other educational benefits such as the Yellow Ribbon program and Vocational Rehabilitation, Chapter 31 for veterans with service-connected disabilities by the VBA is another significant barrier SSM/Vs face, which also creates challenges in degree or program completion (Molina et al., 2015). In fact, the benefit process is known to be “a complicated bureaucratic procedure often fraught with delays” (Griffin & Gilbert, 2012, p. 10). The delays in claims processing can result in extreme financial hardship for SSM/Vs who depend on these benefits as a source of income. Consequences of such delays can include distressing situations, such as eviction notices, utility shutoffs, and large amounts of accrued personal debt (GAO, 2013; Molina et al., 2015).

Additionally, a revision to the Post-9/11 GI Bill (i.e., Post-9/11 Veterans Educational Assistance Improvements Act of 2010; GAO, 2013), which came into effect on August 1, 2011, resulted in the loss of “break pay” or “interval pay.” This means that the housing allowance under the newest bill would be eliminated during school breaks (e.g., winter recess) causing serious financial challenges and putting SSM/Vs at risk for homelessness, and again posing a risk for retention (Molina et al., 2015).

Furthermore, the Post-9/11 GI Bill allocates funds for 36 months and this is often not enough time to complete an undergraduate degree, therefore, SSM/Vs are at risk for dropping out or taking on additional student debt through loans (Cate, 2014). The most recent expansion of the “Forever GI Bill” or the Harry W. Colmery Veterans Education Act of 2017, extends the time limit for those studying in STEM fields (science, technology, engineering, and math) by another nine months and eliminates the 15-year time span for accessing Post-9/11 GI Bill benefits for those with the last discharge or separation date from active duty service on or after January 1,

2013 (U.S. Department of Veterans Affairs, n.d.-b). Although these improvements in benefits help some SSM/Vs, certain provisions do not apply to all SSM/Vs. Additionally, for the students that are activated into military service or deployed during a semester (such as those on active duty status or part of the Reserve/National Guard components), many colleges and universities do not offer tuition refunds, thus further promoting financial debt and insecurity (Hitt et al., 2015). In fact, financial issues have been cited in the literature as having the most significant deleterious impact on SSM/V persistence (DiRamio & Jarvis, 2011; Schiavone & Gentry, 2014; Wheeler, 2012). The GI Bill benefit also incentivizes attendance for resident in-state public institutions of higher learning, but in some states these institutions are underfunded and thus restrict SSM/Vs' opportunity and social mobility (Jenner, 2017). Jenner (2017) adds that for those SSM/Vs who seek private postsecondary institutions with rising tuitions and costs, a private college education, even with the GI Bill and housing allowances determined by zip code, is often unaffordable and thus restricts college accessibility. The Yellow Ribbon program is a VA benefit that helps eligible students and participating institutions cover additional educational costs that exceed the maximum allowed rates under the Post-9/11 GI Bill, such as covering out-of-state fees, private colleges, or graduate school (U.S. Department of Veterans Affairs, n.d.-e). However, not all SSM/Vs are eligible and not all IHLs participate in the program. Many SSM/Vs are also first-generation students and come from low-income households. These groups are often reluctant to take out loans and accrue debt, which impacts college choice (Burdman, 2005; Jenner, 2017).

Credit Transfers

Studies have shown that SSM/Vs often request credit for their military training and service, yet few institutions of higher education are familiar with transcript evaluation and most

lack policies and procedures for doing so (Griffin & Gilbert, 2012). A prior learning assessment (PLA) is a process offered by some postsecondary educational institutions that review academic credit for experiences outside the classroom, and this has shown to result in greater student persistence and shorter time to degrees than with no PLA credits (Council for Adult and Experiential Learning [CAEL], 2010). The U.S. Department of Defense has a contract with ACE's Center for Lifelong Learning in order to implement the Defense Activity for Non-Traditional Education Support (DANTES, 2013), which evaluates military training courses and reviews how military occupations can align with the earning of academic credits among other initiatives. However, as stated, not all institutions of higher education participate in this program and there has been a lack of systematic reporting for those IHLs that do participate.

For-Profit Colleges

Some for-profit IHLs have been known to incentivize SSM/Vs with promises of accessible, rapid, flexible (online) college degrees and to utilize aggressive recruitment strategies with little consideration of student outcomes (Griffin & Gilbert, 2012). The challenge for SSM/Vs is that these institutions report high attrition rates, beyond 50%, and often misrepresent their accreditation status, thus potentially hindering SSM/Vs' successful transition to civilian employment (Griffin & Gilbert, 2012; Patton, 2013). The reason for targeting SSM/Vs is that these institutions are after the GI Bill funding under the 90/10 Rule (Molina et al., 2015; Patton, 2013). Under this policy, at least 10% of the tuition dollars at for-profit institutions must come from sources other than federal aid or Title IV funds, and the GI Bill is considered a private source. These "predatory" institutions have received about half of the funds under the Post-9/11 GI Bill (Patton, 2013). Thus, SSM/Vs who attend for-profit IHLs can feasibly accrue significant

debt without much to show in terms of obtaining a legitimate degree, or they end up dropping out.

Employment

Many SSM/Vs need to be employed while attending college to support their families and/or because of insufficient funding for expenses incurred outside of college. Various studies have noted that veterans who have separated from the military often face challenges locating employment and are often forced to rely on unemployment insurance benefits while receiving education benefits as they look for work (Molina et al., 2015). These challenges are also present for those in the Reserve/National Guard forces that return from combat and experience difficulties in becoming reemployed in the civilian sector (Molina et al., 2015; Williamson & Mulhall, 2009). There are also issues with receiving timely unemployment insurance benefits. Additionally, veterans are sometimes initially and erroneously denied the unemployment benefit because they disclosed their educational intent rather than their occupational aims; however, veterans are eligible to receive both types of benefits simultaneously.

Student Service Members/Veterans with Families

As with many nontraditional students, SSM/Vs also experience challenges related to childcare responsibilities and competing life and family demands, which all pose potential barriers to access and retention (Johnson & Kestler, 2013). Esqueda et al. (2015) argued that military dependents (spouses and children) are not represented in the literature even though they can be a great source of support for the SSM/Vs, as well as a source of stress. IHLs have done little to address family as part of the formula for SSM/V success. Adamson et al., (2015) posited that healthy marital, intimate, and family relationships serve as protective factors for veterans' transitioning from military service, while the opposite can contribute to mental health challenges

and suicide risk; in fact, suicide in veterans has been linked to failed relationships (Satcher et al., 2012).

Military Sexual Trauma

Military sexual trauma (MST) is experienced by an estimated one out of four women in the military and one out of a hundred men (U.S. Department of Veterans Affairs, n.d.-d). According to the VA, MST includes sexual assault and unwanted sexual touching, grabbing, offensive remarks of a sexual nature, or sexual harassment. However, these estimates of incidence of MST may be underestimated as these numbers do not reflect unreported cases (Rolbiecki et al., 2015). Rape during military service by either a superior or a peer is thought to have long lasting and devastating effects on the survivor and can include possible detrimental mental health consequences such as PTSD, substance abuse, physical health problems, depression, isolation, and suicide (Haskell et al., 2010). Prolonged PTSD has been associated with memory problems and having a negative impact on learning (Bremner, 2000). Thus, Rolbiecki et al. (2015) argued that this subgroup of SSM/Vs may feel vulnerable on campus and must be made to feel safe in their educational setting to ensure their academic success.

Sexual Minorities

Those SSM/Vs who identify as sexual minorities (lesbian, gay, bisexual, or transgender [LGBT]) can face a “double jeopardy” in IHLs, in that they have to contend with having both veteran status and cope with the stress and societal stigma associated with being a sexual minority (Hequembourg & Dearing, 2013; Pelts et al., 2015). Pelts et al. (2015) argued that transgender individuals are at even greater risk of discrimination (in society and on college campuses) given that their expressed identity does not match their birth gender identity. Given the historical discriminatory and homophobic U.S. military policies associated with “Don’t Ask

Don't Tell" (DADT), there is inconsistent current and historical data on the number of veterans that identify as sexual minorities. The most current known data since the repeal of the DADT in 2010 across military branches estimates that 71,000 active duty, reserve, and guard personnel have identified as LGB (Gates, 2010) and 15,500 as transgender (Gates & Herman, 2014). As far as veterans the figures have been reported as 941,000 LGB (Ramirez et al., 2013) and 134,300 as transgender (Gates & Herman, 2014). Currently with both the repeal of DADT and the lifting of the ban on transgender service members at the time of this writing, more information is coming to light and the DoD is seemingly shifting towards recognizing the value of diversity and inclusion in incorporating LGBT service members (McNamara et al., 2019). However, it has been well-documented that in civilian populations, stress and institutional marginalization associated with individuals identifying as LGBT have been associated with poorer health, mental health, well-being (Meyer, 2003), and educational outcomes (Windmeyer et al., 2013) when compared with those who have identified as non-LGBT.

Military-Friendly Institutions

Student veteran success in higher education does not only depend on the individual student but also on the role of the institution (Herrmann et al., 2008; Zinger & Cohen, 2010). It has been suggested that by having a welcoming college/university environment and one that provides formal support systems for SSM/Vs, that these institutional attributes can result in positive outcomes for SSM/Vs (Kim & Cole, 2013). In an attempt to address the influx of SSM/Vs into IHLs and the ability to meet their needs in combination with unethical recruitment practices by some for-profit colleges, as previously mentioned, the U.S. Department of Education in 2013, in conjunction with the VA, developed the 8 Keys to Veterans' Success (U.S. Department of Education, n.d.). President Obama laid the foundation for the keys to success

when he signed an executive order (13607) in 2012, codifying the ways that colleges/universities approach SSM/Vs to promote their success. The keys to success consisted of voluntary steps and initiatives that postsecondary institutions could take in order help SSM/Vs to “transition to higher education, complete their college programs, and obtain career-ready skills,” (U.S. Department of Education, n.d., para. 1). The 8 keys are:

1. “Create a culture of trust and connectedness across the campus community to promote well-being and success for veterans.
2. Ensure consistent and sustained support from campus leadership.
3. Implement an early alert system to ensure all veterans receive academic, career, and financial advice before challenges become overwhelming.
4. Coordinate and centralize campus efforts for all veterans, together with the creation of a designated space for them (even if limited in size).
5. Collaborate with local communities and organizations, including government agencies, to align and coordinate various services for veterans.
6. Utilize a uniform set of data tools to collect and track information on veterans, including demographics, retention, and degree completion.
7. Provide comprehensive professional development for faculty and staff on issues and challenges unique to veterans.
8. Develop systems that ensure sustainability of effective practices for veterans” (U.S. Department of Education, 2013, para. 2).

Institutions of higher education self-identify as military-friendly and embrace the 8 keys by offering services and programs meant to increase access and academic success of SSM/Vs. Additionally, some colleges and universities enrolled in the Department of Defense

Servicemembers Opportunity College Program (SOC), but as of March 29, 2019, it was no longer operative (DANTES, n.d.). The original intent of the SOC, founded in 1972, was to ease transferability of college credits and residency for service members, who frequently relocated due to their military service obligations and moved from one IHL to another (see history of SOC in Clinton, 1997). Daly and Garrity (2013) conducted an empirical study of 1,900 institutions that were previously enrolled in SOC and self-identified as friendly towards their student veterans. The authors found that there is large variance in terms of organizational and departmental structures of how institutions address student veteran issues, policies, and programming. Additionally, 62% of institutions that responded to a survey by McBain et al., (2012) reported that they offered some specifically designed services or programs for SSM/Vs. While a more recent study by Aikins et al. (2015) found that of the 723 IHL's surveyed, 57 % offered programs or services for SSM/Vs and most of the institutions were 4-year public colleges/universities and community colleges. Colleges that have SSM/V populations comprising 1% to 3% of their overall student body might provide more programming than others, however, there is no known standard as to what determines a significant SSM/V population (Cook & Kim, 2009).

Although SOC is no longer active, many IHLs still self-identify as military friendly. A popular veteran-owned, national private organization identifies military-friendly employers and IHLs through designated criteria and by the utilization of an online survey. According to the organization's website, "Military Friendly® is the standard that measures an organization's commitment, effort and success in creating sustainable and meaningful benefit for the military community" (www.militaryfriendly.com). The company states that the online survey was informed by an external advisory council that provided input into the standards, the survey

methodology, and the weighting of categories, and that it is being audited by the outside consultancy firm of Ernst and Young. According to the website, there are six categories of standards: “academic policies and compliance; admissions and orientation; culture and commitment; financial aid and assistance, graduation and career, and military support and retention.” The designations range from meeting the standard to exceeding it (i.e., “designated,” “bronze,” “silver,” “gold,” and “top 10”) (www.militaryfriendly.com/mfsguide/). Again, there is no known data in the literature to date about what military friendly entails and whether the IHLs’ self-ascribed military-friendly institutional designation results in better outcomes for SSM/Vs. Herrmann et al. (2009) suggested that SSM/Vs must assess this for themselves through several indications: for example, having a Reserve Officer Training Corps (ROTC) on campus and having faculty and administrative staff with prior military service. Semer and Harmening (2015) added that campus-based student veteran groups, activities for networking, and a campus chapter of Student Veterans of America could help to create a positive institutional environment for SSM/Vs.

Kirchner (2015) summed up that military-friendly IHLs offer a certifying VA official to process educational benefits, have a standalone VRC, sponsor SSM/V organizations, provide veteran-specific orientations as well as faculty trainings on military culture. Again, this designation has not been standardized, nor is it monitored by the VA for quality, nor has it been systematically, empirically researched in terms of SSM/Vs’ college/university experience or academic outcomes.

One known study on the benefits of being in a military-friendly institution came from a secondary data analysis of 206 men at different community colleges across the nation, comparing the nonveteran students and SSM/Vs in military-friendly designated institutions versus those

without the designation with regards to student perceptions of faculty behaviors (Heineman, 2014). Heineman (2014) found that SSM/Vs in military-friendly designated community colleges did not feel that faculty provided them with a sense of belonging or validated their abilities in comparison to those in non-designated colleges and students of nonveteran status (Heineman, 2014).

Conclusion

This chapter provided an overview of what is currently known about SSM/Vs in relation to the challenges they face as they transition into to IHL's as well as various theories that serve as guideposts informing the present study. However, through this literature review, it becomes clear that little is known from an empirical point of view regarding how to ensure that SSM/Vs are successful as they transition from military service into civilian life through higher education.

The next chapter will describe the research methodology used to carry out the present study and to test various hypotheses.

Chapter 3: Study Methodology

This chapter provides information on the hypotheses, research design, sampling, and study procedures. The measures, along with the operationalization of the predictors and indicator variables, are also described. The chapter concludes with an overview of the data analytic strategies and testing of assumptions.

Hypotheses

The following hypotheses comprise and guide the present study (please see Figure 3 for a conceptual model):

Hypothesis 1(a): Positive functioning in SSM/Vs will predict their academic performance in terms of their cumulative GPA. Thus, the SSM/Vs that report higher levels of positive functioning will also likely report higher GPAs than those who report lower levels of positive functioning.

Hypothesis 1(b): Positive functioning will predict SSM/Vs' academic performance in terms of perceiving themselves as on time towards program completion. Thus, the SSM/Vs that report higher levels of positive functioning will also likely consider themselves on time towards program completion than those with lower levels of positive functioning.

Hypothesis 1(c): Positive functioning will predict SSM/Vs' academic performance in terms of their beliefs of meeting their academic goals. Thus, the SSM/Vs that report higher levels of positive functioning will also likely believe they have met their academic goals than those with lower levels of positive functioning.

Hypothesis 2(a): Positive college/university environment will predict GPA. Thus, the SSM/Vs that report higher levels of perceived positive college/university environment (i.e.,

social climate) will likely report having higher GPAs than those with lower perceptions of positive college/university environment.

Hypothesis 2(b): Positive college/university environment will predict SSM/Vs' beliefs that they are on time towards program completion. Thus, the SSM/Vs that report higher levels of perceived positive college/university environment will be more likely to believe that they are on time towards program completion than those with lower perceptions of positive college/university environment.

Hypothesis 2(c): Positive college/university environment will predict SSM/Vs' beliefs that they are meeting their academic goals. Thus, the SSM/Vs that report higher levels of perceived positive college/university environment will be more likely to believe they are meeting their academic goals than those with lower perceptions of positive college/university environment.

Hypothesis 3(a): Positive sense of college/university belonging (i.e., psychological sense of community) will predict SSM/Vs' reported cumulative GPA. Thus, the SSM/Vs that report a greater sense of belonging will be more likely to report higher cumulative GPAs than those with a lower sense of college/university belonging.

Hypothesis 3(b): Positive sense of college/university belonging will predict SSM/Vs' beliefs that they are on time towards program completion. Thus, the SSM/Vs that report a higher sense of belonging will more likely believe that they are on time toward program completion than those with a lower sense of college/university belonging.

Hypothesis 3(c): Positive sense of belonging will predict SSM/Vs' beliefs that they are meeting their academic goals. Thus, the SSM/Vs that report a higher sense of belonging will

more likely believe that they are meeting their academic goals than those with a lower sense of college/university belonging.

The hypotheses related to positive functioning and GPA are based on findings of prior studies indicating that well-being in college students is a significant predictor of academic achievement in terms of GPA (Coffey et al., 2016; Tansey et al., 2018; Umucu et al., 2019). Positive functioning in relation to SSM/Vs' perceptions of being on time and meeting academic goals is predicated on the assumption that positive functioning will play a role on these perceptions and where data has shown that "on average, Veterans participating in the GI Bill program, require longer time to complete their certificates (2.3 years longer) and degrees (1.8 to 2 years longer depending on the type of degree) than traditional students in the general population cohort (those who pursue a full-time education soon after receiving a high school diploma)" (U.S. Department of Veterans Affairs, 2015, p. 10). Whereas, the hypotheses regarding perceptions of university/college environment and sense of university/college belonging are partly based on findings from the National Survey of Student Engagement (NNSE, 2010). The NNSE findings showed that SSM/Vs were less engaged with faculty and staff and held perceptions that their campus environments were less supportive as compared to their nonveteran peers. And as prior studies have indicated, a student's social integration in a college setting has been associated with greater institutional commitment and college persistence (Braxton et al., 1997). In general, students' sense of belonging in academic college environments (primarily a sense of social acceptance by fellow students and university personnel/a psychological sense of community) has been shown to be related to positive academic and college adjustment outcomes for students (Freeman et al., 2007). Additionally, from an ecological systems theoretical perspective, a positive college/university environment and

college/university sense of belonging will likely be important contributing factors to SSM/Vs' academic performance.

Figure 3

Conceptual Predictive Model

Research Design

The study uses a quantitative cross-sectional electronic survey to determine SSM/Vs' perceived positive functioning, academic performance, and background characteristics at various colleges/universities in the U.S. The study examined whether SSM/Vs' positive functioning, perceptions of positive college/university climate, and sense of belonging predicted academic performance.

Sampling

The sample was of convenience from seven colleges and universities known to this researcher in the U.S. states of Washington, Texas, and California. The total sample size was comprised of 199 SSM/Vs and most were separated from the military (i.e., veteran status). The types of institutions that made up the sample were two community colleges, one 2-year public university (non-community college), three 4-year public universities, and one private 4-year university. The sizes of the institutions varied from midsize (about 11,000 students) to large (40,000+ students). For this study, the institutions were not identified by name to protect the privacy of the participating IHLs. Eligibility for the colleges/universities to participate in the study was that they had to self-identify as military friendly. Eligibility for student participation consisted of individuals' being at least 18 years of age and currently enrolled and identifying as post-9/11-era SSM/Vs, including those on active duty, in the Reserves, National Guard, or of veteran status (i.e., separated or retired from the military). The SSM/Vs were recruited via email through directors or coordinators of campus-based VRCs, leaders of SSM/V campus-based student organizations, and/or faculty members having SSMVs in their respective programs. The invitation contained a brief description of the study and an electronic link to the survey with consent to participate.

Procedures

The researcher took the protection of human subjects into consideration. Claremont Graduate University (CGU) Institutional Review Board (IRB) deemed the study exempt. Several IRBs of the participating colleges and universities examined the study protocol and approved it for their respective institutions.

The investigator collected data between March and August of 2020. Data collection began with a community college sample from California through the director of the VRC at the college. Due to the timing associated with COVID-19, responses from SSM/Vs were limited as the VRC was not functioning at full capacity and thus not able to do much outreach to SSM/Vs. Although the original plan was to only sample one college, the researcher had to pivot and include more colleges to obtain an adequate sample size for the study. The California community college sample was comprised of only 23 SSM/Vs. Therefore, the researcher reached out to other colleges and universities and had to create a more inclusive survey that added an item on college types (i.e., community college, 4-year public, 4-year private, etc.) and removed items that were specific to the VRC programming offered at the original community college in California (e.g., “How often do you use services at VRC, such as the computer lab or student lounge?”). Both surveys (the original community college survey and the general survey for various institution types) were administered through the Qualtrics software survey platform. The California community college SSM/Vs received the original version of the survey and all other SSM/Vs from the additional colleges received the alternative version which was more generic and not specific to the California community college VRC programs and activities. Procedurally, to recruit participants for the study, all SSM/Vs were sent an introductory email with an explanation of the study and its importance. The Qualtrics link was sent to various directors/coordinators of campus based VRCs around the nation that were known or identified by this investigator. The investigator also reached out to SSM/V student leaders of campus organizations and known faculty members of various colleges/universities. Nine different institutions were identified and contacted by email and seven of those agreed to participate either through the VRC directors, the SSM/V student leaders, or through faculty members. All the

institutions in the study noted in their respective websites that they deemed themselves as being military friendly and all of them had at least a VRC (i.e., Veteran Resource Center/Office of Student Veteran Services) on campus.

All student participants were emailed through college/university listservs or individual emails (for privacy concerns, all email correspondence was sent with blind carbon copy [bcc] to protect the identification of individual email addresses). The SSM/Vs were provided with an introductory email from the VRC director, student leader, or faculty member that included the invitation to participate in the study (See Appendix A), briefly explained the study, and offered the link to the electronic survey. The researcher's contact information as well as the IRB's contact information were also provided as part of the electronic consent that accompanied the survey. The first section of the survey contained the consent, including information such as the voluntary and anonymous nature of the study, and the benefits and risks of participation among other information (see Appendix B with the consent form). Once the participant electronically consented (by checking "I agree to participate"), then they were able to continue onto the actual survey.

As mentioned, invitational emails were sent to SSM/Vs during the middle of spring 2020 semester (March) through the summer semester (August) 2020, which coincided with the COVID-19 pandemic. The two community colleges (the original California college and an added community college from Texas) that participated in the study sent various reminder emails to the SSM/Vs during this time. The other colleges/universities only sent the invitation once since they did not wish to overload the SSM/Vs with emails and requests during the pandemic. There were no incentives offered for participation. The survey took approximately 20–25 minutes to complete.

Measures

The survey for this study was comprised of items developed by the current investigator as well as items adopted from other researchers. The full survey is found in Appendix C. This is the survey that was distributed to all the additional colleges/universities (general survey) that makes up most of the sample ($N=176$, 88.4%). The survey is comprised of 58-items (Likert-type, multiple-choice and yes/no questions) with one concluding open-ended response item. The components of the survey are described in this section. Other than the PF-W scale, all other items were independently reviewed by three subject matter experts for content validity and language comprehensibility.

Sample Characteristics

A demographic and military background questionnaire was constructed by the investigator for this study, some of the military-related items were derived from the Transitioning to Civilian Life Scale (TCLS) developed by this researcher and colleagues (Weiss et al., 2019). For example, from the TCLS and commonly found in other instruments geared for military veterans, most recent branch of service was ascertained by having respondents choose from the following categories (e.g., “Coast Guard,” “Army,” “Navy,” “Marine Corps,” or “Air Force”); most recent service component (e.g., “active duty,” “Reserve,” or “National Guard”); and time since military discharge (if applicable). A single item, created specifically for this study, asked SSM/Vs to note their number of deployments to combat zones (i.e., hazardous duty). The response choices were 0, 1–2, 3–4, 5–6, or 7 and over.

The general demographic information collected consisted of SSM/Vs’ age, ethnicity/race, gender, marital status, and employment status. A single item was created to gauge whether

SSM/Vs had experienced any periods of homelessness during academic studies while attending the present institution with the use of a dichotomous response (i.e., “yes,” “no”).

Another single item adopted from Weiss et al. (2019) was used to ascertain whether SSM/Vs were currently receiving or in need of counseling for any emotional difficulties or substance abuse problems, prior to COVID-19 (where respondents were given the choices of selecting, “yes,” “no,” or “not sure”).

Institutional Items

Enrollment status, university type, and highest degree or academic achievement being pursued was ascertained. For instance, for enrollment status the participants were asked to select one of the following choices: “enrolled as a student full-time,” “enrolled as a student part-time,” or “currently not enrolled;” and for type of institution, “public two-year college,” i.e., community college; “public two-year college/university [non-community college],” “public four-year college/university,” “private four-year college/university,” or “other.” For the highest degree, certification, or achievement sought at this college/university, students were asked to choose one of the following: “Associate degree,” “Associate Degree and Seeking to Transfer to a 4-year College/University,” “Bachelor degree,” “Certificate,” “Non-credit program,” “Graduate degree,” “Not Seeking a Degree or Certification, Only Transfer to a Four-year College/University,” or “other.”

Given COVID-19 and the sudden shift to online learning, two items assessed type of learning format prior to the pandemic and after the transition to online learning. The learning format prior to COVID-19 included type of learning format (“on-the-ground [traditional classroom],” “online/virtual,” or “both online and on-the ground”); and a single item on students’ perceptions of how well they were transitioning to online education on a 5-point scale (1= *Not*

well at all, 5 = *Extremely well*) was included. Researchers have supported the use of single item to measure a specific domain (Rossi et al., 2004).

Campus Based SSM/V Services

The researcher created questions regarding campus services or programs for SSM/Vs for the study. For instance, awareness of campus-based VRC or Office of Student Veteran Services (“yes,” “no”); satisfaction with utilization of services/resources/programs/events through the VRC measured on a 5-point Likert scale (where 1 = *Extremely dissatisfied*, 5 = *Extremely satisfied*); participation in campus events for SSM/Vs outside of the VRC (“yes,” “no”); general satisfaction with services/programs/resources/events for SSM/Vs at this college/university (outside of the VRC) on a 5-point scale, (where 1 = *Extremely dissatisfied*, 5 = *Extremely satisfied*). An open-ended question at the very end of the survey asked, “What can this college/university do or offer to better meet any of your needs?”

Predictor Variables

The study included predictor variables. First, positive functioning was measured by the PF-W scale (Donaldson, 2019; Donaldson & Donaldson, 2021). Second, SSM/Vs’ perceptions of positive university/college environment (i.e., social climate) towards SSM/Vs and their sense of university/college belonging (i.e., psychological sense of community) were created by the researcher and adapted from existing scales. Age and gender were used as control variables. Greater details on the measures are provided in the next section.

Positive Functioning

The study measured SSM/Vs’ positive functioning through the validated Positive Functioning at Work Scale (PF-W) developed by Donaldson (2019) and Donaldson and Donaldson (2021). As previously mentioned, the PF-W Scale was originally designed for

measuring workplace and employee positive functioning and is mostly based on the PERMA-Profiler (Butler & Kern, 2016) that measures the five pillars (or building blocks) of well-being as proposed by Seligman's (2011) Well-Being Theory. PERMA, as previously noted, represents Positive emotion (experiencing happiness, joy, gratitude), positive Engagement (using strengths to meet challenges, experiencing flow), positive Relationship (connecting with others; to love and be loved) positive Meaning (connect to meaning; find purpose in life), and positive Accomplishment (pursue and accomplish goals; strive for greatness) (Donaldson, 2019; Donaldson & Donaldson, 2021). The PF-W added four pillars (building blocks) to the original PERMA model for a total of nine building blocks (i.e., PERMA +4) including positive mindset (future-oriented, growth mindset, perseverance), positive physical health (biological, functional, and psychological health assets), positive economic security (perception of financial security), and positive physical work environment (spatiotemporal elements, such as access to natural light, nature, and physiological safety) (Donaldson, 2019; Donaldson & Donaldson, 2021; Donaldson et al., 2020). In the PF-W, respondents reported their perceived level of positive functioning using a 7-point Likert scale (where 1 = *Strongly disagree*; 7 = *Strongly agree*). The items were scored so that the higher the scores, the higher the positive functioning. All items were positively worded. The current instrument to measure positive functioning for this study comprised of 29 Likert-type items on 7-point scales (where 1 = *Strongly disagree*; 7 = *Strongly agree*) that were derived from the PF-W. However, the current scale was slightly adapted from the PF-W for this study in that the four items on positive physical work environment (i.e., physical and spatial work environment) were removed, as these did not seem to correspond to the university/college environment being assessed in this study. As with PF-W, higher scores indicated higher levels of positive functioning. The Cronbach's alpha coefficient for SSM/Vs' positive functioning for the

present study was excellent ($\alpha = .95$). Additionally, please see the results section for the findings from the CFA conducted as part of this study.

Perceptions of Positive College/University Environment

Positive college/university environment (i.e., social climate) was assessed with two items on a 7-point Likert scale (where 1 = *Strongly disagree*; 7 = *Strongly agree*): “The university community feels welcoming to student veterans” and “Faculty, administrators and staff at this university go out of their way to support student veterans.” The author created these two items for the purpose of this study and adapted them from two different existing scales. The former item is adapted from Yorke’s (2016) Student Belongingness, Engagement and Self-Confidence Survey and the latter from Lee et al.’s (2017) School Climate and School Identification Measure. The Cronbach’s alpha coefficient for SSV/Ms’ perceptions of college/university environment calculated in this present study was acceptable ($\alpha = .78$).

Sense of College Belonging

The study uses two items to measure SSM/Vs’ sense of college/university belonging with a 7-point Likert scale (where 1 = *Strongly disagree*; 7 = *Strongly agree*). The two items, “I can really be myself at this university” (social acceptance) and “I feel like a real part of this university” (university belonging), were adapted from Freeman et al.’s (2007) Sense of Belonging Scale for college-level students and originally introduced in Goodenow’s (1993) The Psychological Sense of School Membership Scale. The Cronbach’s alphas in the Freeman et al. (2007) study had been reported to be .79 for the university belonging subscale and .83 for the social acceptance subscale. The Freeman et al. items were answered using a 5-point Likert scale, however, for the purposes of this study, 7-point scales (where 1 = *Strongly disagree*; 7 = *Strongly agree*) were used to match the anchors from the PF-W. Sense of belonging was selected

as a predictor as it has been strongly associated with students' intention to persist (Hausmann et al., 2007). The Cronbach's alpha coefficient for sense of belonging calculated in this present study was acceptable ($\alpha = .75$).

Indicators/Outcome Measures

Academic Performance

The study measures SSM/Vs' academic performance through self-reported cumulative grade point average (GPA), a commonly used measure of student progress. In the present study, participants selected one GPA category, where 4.0 was the highest (e.g., 3.85–4.00; 3.60–3.84; 3.25–3.59; 2.90–3.24; 2.60–2.89; 2.25–2.59; 1.90–2.24; 1.89 and below). The specific range for these grade categories was derived from a catalog from one of the universities in the study sample. In addition to GPA, the researcher created two other performance measures for the study. According to the literature, some SSM/Vs have challenges completing their postsecondary educational programs on a timely basis (Cate, 2014). Therefore, SSM/Vs' perceptions of being “on time towards program completion” (“yes, no”) was included as an indicator. SSM/Vs' beliefs of “meeting academic goals” (“yes, no”) was an item adapted from a college student self-efficacy study (Chemers et al., 2001). Research shows educational self-efficacy to be an important consideration in SSM/Vs' educational trajectories (Whiteman et al., 2013).

Overview of Analytic Strategies and Testing of Assumptions

After the completion of data collection, merging, and cleaning, data analyses were conducted in RStudio (version 1.3.1056, The R Foundation for Statistical Computing). The researcher used several R packages: psych (Revelle, n.d., 2019), MissMech (Jamshidan et al., 2014), laavan (Rosseel, 2012), MASS (Venables & Ripley, 2002), and Base R statistical package

(Chambers & Hastie, 1992). Analyses were then replicated with the Statistical Package for the Social Sciences (SPSS version 25, IBM).

The two SSM/V data sets (i.e., from the original community college in California and the data from the other colleges/universities) were merged utilizing a “full join in R” prior to data analysis. Only items from the general survey were maintained for analyses; the specific items relating to the original community college VRC programs and services were not included in the analyses.

Data screening is an important process in checking for the potential violation of assumptions before being able to test the predictive models (Hair et al., 2010). For example, the researcher ran descriptive statistics to detect non-normality, outliers, missing data, and the potential for coding errors. Univariate outliers were identified and retained on individual items of the PF-W scale because the responses did not seem random. Instead, these seemed to represent true variation within the SSM/V population. Composite scores were calculated for the PF-W scale, the college/university environment items, and the belonging items. All were normally distributed according to the assumptions of normality (where skewness and kurtosis in the items for this study were within the acceptable range of < 3 and < 10 respectively) (Kline, 2011).

The MissMech package in RStudio as outlined in Jamshidan et al., (2014) was used to assess if the data was missing at random. Only those who did not meet the inclusion criteria (i.e., must be currently enrolled) or those with complete missing responses were found and removed (the cases that were removed represented participants that only opened the survey but had not responded to any items).

Pearson’s correlations (Pearson & Hartley, 1966) were conducted to assess the convergence between variables, and the matrix did not show the presence of multicollinearity,

i.e., when correlations between the independent/predictor variables are 0.9 or higher (Hair et al., 2010). Correlations also guided the regression approach and were used to assess the assumption of linearity for the model variables (i.e., predictors, indicators, and control variables).

Descriptive statistics (i.e., frequencies, percentages, means, and standard deviations) were calculated for the study's variables. Cronbach's alphas were computed to assess the internal consistency reliability coefficients of PF-W, perceptions of campus environment, and sense of belonging. Most hypotheses which will be discussed in the next chapter contained ordinal or dichotomous indicator/dependent variables. Those that had ordinal variables were analyzed with ordinal logistic regression, and dichotomous variables were analyzed with binary logistic regression. Beta coefficients and mostly log odds ratios were estimated to assess the relationship between each predictor/independent variable and the indicator/dependent variables. McFadden (1989) was mostly used to calculate the proportion of variance determined by pseudo R^2 for generalized models and R^2 (i.e., coefficient of determination) for general models. Chi-square χ^2 statistic was used to assess the differences between the hypothesized model and the null model.

CFA was used to cross-validate the factor structure of the PF-W scale to evaluate the fit between the model and the observed data (van Prooijen & van der Kloot, 2001). A composite score was used to measure the latent factor, i.e., positive functioning in the hypotheses.

Post hoc analyses on types of institutions as predictors for the various academic performance indicators were conducted using Kruskal-Wallis, Dunn test using Bonferroni and ordinal logistical regression. A linear regression was conducted to examine number of combat deployments predicting academic performance.

Chapter 4: Results

This chapter opens with sample descriptive statistics and then provides the data analyses conducted with the accompanying results. The findings of post hoc analyses are also described.

Sample Descriptive Statistics

A total of 2,000 SSM/Vs were recruited to participate in the study; 281 opened the electronic survey, comprising a 14.1% overall response rate. Of the 281 participants who opened the survey, 76 did not complete it beyond the initial consent form, and were removed from the analyses, thus a total of 205 (72.9%) completed the survey. Six of the participants had to be excluded as one of them did not respond as to whether they were currently enrolled at an IHL and five noted that they were not currently enrolled. Thus, the final sample size was 199, which represented a 71% completion rate.

Descriptive statistics for all the sample demographic characteristics are presented in Table 1. Much of the sample identified as male ($n = 142$, 71.4%) which was expected given that women are a small minority in the Armed Forces. The age range was 21 to 64 with a mean of 33.34 ($SD = 8.64$). A little over half of the sample identified as White ($n = 102$, 51.3%) and many were married ($n = 89$, 44.7%). As far as employment status, the sample had a similar frequency distribution in those that reported working on a part-time basis while attending college ($n = 50$, 25.1%), those that were not employed due to being full-time students ($n = 50$, 25.1%), and those who reported being employed on a full-time basis while attending college ($n = 41$, 20%). Most SSM/Vs indicated that they had not received nor considered themselves in need of counseling or treatment services for emotional difficulties or substance use problems ($n = 111$, 55.8%), while more than one-third indicated that they had received or felt that they needed counseling for emotional or substance use problems ($n = 75$, 37.7%). Nearly most of the sample

($n = 185$, 93.0%) reported that they had not faced housing insecurity and 13 (6.5%) reported being homeless at some point in time while at their respective IHL.

Military Background Characteristics

The top three branches of most recent military service represented in this sample were Army ($n = 73$, 36.7%), followed by Marine Corps ($n = 53$, 26.6%) and Navy ($n = 41$, 20.6%). Many of the SSM/Vs identified their most recent component had been active duty ($n = 161$, 80.9%), and one did not respond. The majority ($n = 135$, 67.8%) had at least one combat deployment. The mean time of total military service reported in years was 7.78 ($SD = 5.68$), and the mean years since discharge/separation from the military was 5.54 ($SD = 4.98$). Most of the sample (95.0%) was calculated to currently be of veteran status (i.e., separated from the military).

Educational and Institutional Characteristics

Regarding educational/institutional characteristics, 83.9% ($n = 167$) of the sample indicated being enrolled on a full-time basis, with more than one-third pursuing a bachelor's degree ($n = 67$, 37.7%) and more than one-quarter pursuing an associate's degree ($n = 54$, 27.1%). The most common type of institution noted was a 2-year community college ($n = 94$, 47.2%), followed by a public 4-year college/university ($n = 83$, 41.7%) and a private 4-year institution ($n = 20$, 10.1%). (There was only one SSM/V representing a 2-year public institution non-community college). Prior to COVID-19, a little more than half of the students ($n = 111$, 55.8%) indicated they were attending on-the-ground classes and programs (i.e., traditional learning formats) and rated their transition to online learning due to COVID-19 as going moderately well ($M = 3.16$, $SD = 1.31$) on a scale of 1 to 5. All students were asked about transition to online learning (inclusive of those that were already in online programs prior to

COVID). Many of the respondents believed they were on time towards program completion ($n = 146, 73.4\%$) and perceived themselves as meeting their academic goals ($n = 167, 83.9\%$). Many reported GPAs of 3.25 and above ($n = 136, 68.3\%$). The descriptive data indicated that this sample of SSM/Vs perceived themselves as mostly being successful in their academic performance. Regarding SSM/Vs' awareness of VRCs on campus, most were aware ($n = 182, 91.5\%$). Many did not participate in campus-based, veteran-related events/activities/programs outside of the VRC ($n = 147, 73.9\%$). Students were satisfied with VRC-related services/resources/programs/events at their respective campuses ($M = 3.92, SD = 1.11$) as well as campus-based, veteran-related services/resources/programs/events outside of the VRC ($M = 3.60, SD = 1.06$).

Table 1

Sample Characteristics

	n	%	Mean	SD
Age			33.34	8.64
Gender Identification				
Female	55	27.6%		
Male	142	71.4%		
Non-Binary	2	1.0%		
Ethnic Background				
Asian/Pacific Islander	8	4.0%		
Bi-racial or multiracial	22	11.1%		
Black/African American	14	7.0%		
Hispanic/Latino	45	22.6%		
White	102	51.3%		
Other (please write in)	8	4.0%		
Marital Status				
Married	89	44.7%		
Domestic Partnership	7	3.5%		
Divorced	21	10.6%		
Separated	4	2.0%		
Single	77	38.7%		
Widow	1	0.5%		
Employment Status				
Employed Full-Time	41	20.6%		
Employed Part-Time	50	25.1%		
Homemaker	8	4.0%		
Retired	8	4.0%		

	Unable to work	10	5.1%		
	Unemployed but able to work	32	16.1%		
	Not employed because I'm a Full-Time student	50	25.1%		
Currently Receiving or in need of Counseling					
	Yes	75	37.7%		
	Not Sure	13	6.5%		
	No	111	55.8%		
Homelessness					
	Yes	13	6.5%		
	No	185	93.0%		
	No Response	1	0.5%		
Military Branch					
	Air Force	29	14.6%		
	Army	73	36.7%		
	Coast Guard	3	1.5%		
	Marine Corps	53	26.6%		
	Navy	41	20.6%		
Most Recent Service Component					
	Active	161	80.9%		
	National Guard	12	6.0%		
	Reserves	25	12.6%		
	No Response	1	0.5%		
Number of Combat Deployments					
	0	64	32.2%		
	1 or more	135	67.8%		
Total Years Served in the Military				7.78	5.68
Time Since Discharge				5.54	4.98
Veteran Resource Center Awareness					
	Yes	182	91.5%		
	No	17	8.5%		
Veteran Participation Outside of the VRC but still on campus					
	Yes	29	14.6%		
	No	147	73.9%		
	No Response	23	11.5%		
Veteran Resource Center Satisfaction (Scale 1–5)				3.92	1.11
Veteran Satisfaction with Services, Programs, and Resources Outside of VRC (Scale 1–5)				3.60	1.06
Student Enrollment Status					
	Enrolled as a student Full-time	167	83.9%		
	Enrolled as a student Part-time	32	16.1%		
Highest Degree					
	Associate Degree	54	27.1%		
	Associate's Degree (AA) and seeking to transfer to a 4-year university	16	8.0%		
	Bachelor's degree	67	33.7%		
	Certificate	1	0.5%		
	Graduate Degree (Master's, Doctoral)	37	18.6%		
	No degree only seeking to transfer to a 4-year college/university	19	9.6%		
	Other	5	2.5%		
Institution Type					
	Private 4-year college/university	20	10.1%		
	Public 2-year college (community college)	94	47.2%		
	Public 2-year college/university (non-community college)	1	0.5%		
	Public 4-year college/university	83	41.7%		
	Other	1	0.5%		

Online or on-the-ground learning before COVID-19			
	Both online and on-the-ground	58	29.1%
	On-the-ground (traditional classroom)	111	55.8%
	Online/Virtual	30	15.1%
Online Transition (Scale 1–5)		3.16	1.31
On Time Towards Program Completion			
	Yes	146	73.4%
	No	53	26.6%
Meeting Educational Goals			
	Yes	167	83.9%
	No	32	16.1%
Cumulative GPA			
	1.89 and below	4	2.0%
	1.90–2.24	3	1.5%
	2.25–2.59	16	8.1%
	2.60–2.89	12	6.0%
	2.90–3.24	28	14.1%
	3.25–3.59	41	20.6%
	3.60–3.84	45	22.6%
	3.85–4.0	50	25.1%

Note: N = 199

Predictor and Indicator Variables: Descriptive Statistics and Correlations

Bivariate correlations between the study's continuous predictor variables are listed in Table 2. All the variables were positively intercorrelated ($p < 0.01$). The mean score of SSM/Vs' positive functioning as measured through PF-W scale was 5.26 ($SD = .98$), keeping in mind that the scale ranges from 1-7. The mean score of SSM/Vs' perceptions of positive college/university environment was 5.06 ($SD = 1.44$). The mean score of SSM/Vs' sense of belonging was 4.63 ($SD = 1.56$). The Pearson's product-moment correlation coefficients for the predictor variables are also located in the same table. The items correlated well with acceptable to excellent reliability estimates, i.e., Cronbach's alphas.

Table 2*Summary Correlation Table for PF-W, SSM/Vs' Sense of Belonging and Positive Perceptions of Campus Environment*

Study Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1. Pos. Emotion	5.21	1.44	(0.92)										
2. Pos. Relationships	5.35	1.24	.69**	(0.92)									
3. Pos. Engagement	5.73	1.13	.38**	.29**	(0.77)								
4. Positive Meaning	5.32	1.37	.79**	.71**	.41**	(0.85)							
5. Pos. Accomplishment	5.45	1.19	.73**	.72**	.38**	.79**	(0.84)						
6. Pos. Mindset	5.91	0.95	.66**	.58**	.52**	.76**	.76**	(0.78)					
7. Pos. Physical Health	5.16	1.21	.47**	.46**	.42**	.47**	.51**	.56**	(0.78)				
8. Pos. Economic Security	3.97	1.71	.44**	.42**	.20**	.45**	.48**	.38**	.34**	(0.78)			
9. Campus Environment	5.06	1.44	.31**	.39**	.21**	.30**	.30**	.32**	.27**	.28**	(0.78)		
10. Sense of Belonging	4.63	1.56	.50**	.49**	.19**	.42**	.42**	.40**	.34**	.30**	.77**	(0.75)	
11. PF-W	5.26	0.98	.85**	.80**	.56**	.88**	.87**	.83**	.68**	.65**	.39**	.50**	(0.95)

Note: N = 199. Reliabilities in (). *p < 0.05. **p < 0.01. ***p < 0.001.

Correlations for Hypothesis Testing

Table 3 shows the bivariate correlations for the predictive variables and the indicator (dependent) variables. Pearson's product-moment correlation coefficients show that most of the variables were positively and significantly correlated with one another ($p < .01$). Positive functioning per the PF-W scale showed significant positive relationships with most of the variables except for gender as a control variable. Age was correlated with GPA and SSM/Vs' positive functioning, where older SSM/Vs reported greater GPAs and higher positive functioning than younger SSM/Vs.

Table 3*Summary Correlation Table for Hypotheses*

Study Variable	Mean	SD	1	2	3	4	5	6	7
1. PF-W (Positive Functioning)	5.26	0.98							
2. Sense of Belonging	4.63	1.56	.50**						
3. Perceptions of Campus Environment	5.06	1.44	.39**	.77**					
4. Cumulative GPA [^]	6.07	1.76	.24**	0.08	0.03				
5. On Time Towards Graduation (1 = Yes)	0.73	0.44	.24**	.21**	0.13	.39**			
6. Meeting Educational Goals (1 = Yes)	0.84	0.37	.39**	.28**	.19**	.34**	.60**		
7. Age (Control)	33.34	8.64	.14*	0	0	.15*	0.14	0.12	
8. Gender (1 = Female) (Control)	0.28	0.45	0.01	0.07	0.07	0.05	0.04	0.03	0.11

Note: N=199. *p < 0.05. **p < 0.01. ***p < 0.001.

[^] For the Cumulative GPA Variable, 1 = 1.89 and below, 2 = 1.90–2.24, 3 = 2.25–2.59, 4 = 2.60–2.89, 5 = 2.90–3.24, 6 = 3.25–3.59, 7 = 3.60–3.84, 8 = 3.85–4.0

Hypothesis Testing and Regression Analyses

Hypothesis 1(a) stated that positive functioning would predict SSM/Vs' academic performance in terms of GPA. The researcher ran an ordinal logistic regression analysis to investigate the role positive functioning played in SSM/Vs' cumulative GPA. As shown in Table 4, positive functioning in the ordinal logistic regression analysis was found to contribute positively to the model: ($\beta = 0.334$, $p = 0.018$, $\exp(\beta) = 1.397$, McFadden's pseudo $R^2 = 0.018$). With an effect size of 2% and the cumulative odds ratio for SSM/Vs with higher positive functioning scores, the odds of being more likely to have a higher GPA is 1.4 times greater than for those with lower positive functioning scores. Thus, the findings provide support for *Hypothesis 1(a)*. Additionally, to test the proportional odds assumption, the author ran a parallel regression analysis using the *brant* package in RStudio based on Brant's (1990) paper on assessing proportional odds ratios for ordinal logistic regression. Results demonstrated that the null hypothesis of the parallel regression assumption held, $p = 0.289$.

Table 4*Summary of Ordinal Logistic Regression Models for PF-W Predicting SSM/Vs' Cumulative GPA*

Predictor	β	SE	Wald	e^{β} [CI]
Intercepts				
1.89 and below 1.90-2.24	-0.360	1.475	0.060	
1.90-2.24 2.25-2.59	0.221	1.441	0.023	
2.25-2.59 2.60-2.89	1.526	1.417	1.161	
2.60-2.89 2.90-3.24	2.036	1.417	2.063	
2.90-3.24 3.25-3.59	2.846	1.423	3.996*	
3.25-3.59 3.60-3.84	3.751	1.433	6.851**	
3.60-3.84 3.85-4.0	4.787	1.445	10.97***	
PF-W (Positive Functioning)	0.334	0.133	6.297*	1.397 [1.088, 1.891]
Model Fit				
Null	715.774			
Final	703.112	12.662*	4	0.018

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. N.S. = Not Significant

Hypothesis 1(b) stated that positive functioning would predict SSM/Vs' academic performance in terms of considering themselves on time towards program completion. A binary logistic regression analysis was conducted to investigate the role positive functioning played on SSM/Vs' beliefs that they were on time towards program completion. As shown in Table 5, positive functioning was found to positively contribute to the model: ($\beta = 0.554$ $p = 0.001$, $\exp(\beta) = 1.740$, McFadden's pseudo $R^2 = 0.072$). With an effect size of 7%, the estimated odds ratio favored an increase of nearly 74% in the belief of participants' being on time towards program completion for every unit increase in positive functioning. An ANOVA was leveraged in RStudio to determine if the chi-square difference was significant between the null model and the hypothesized model. There was a significant difference from the null model compared to the hypothesized model with $\Delta\chi^2(4) = 12.662$, $p = 0.013$. *Hypothesis 1(b)* was supported by the data.

Table 5

Summary of Logit Regression Models for PF-W Predicting SSM/Vs' Perceptions of Being On Time

Predictor	β	SE	df	e^{β} [CI]
Intercept	-2.832	1.165		1.740
PF-W (Positive Functioning)	0.554***	0.168		[1.247, 2.418]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	230.670			
Final	214.070	16.602**	4	0.072

Note: Controls are age and gender (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$, N.S. = Not Significant

Hypothesis 1(c) stated that positive functioning would predict SSM/Vs' beliefs of meeting their academic goals. The researcher used a binary logistic regression analysis to investigate the role positive functioning played in SSM/Vs' beliefs that they were meeting their educational goals. As shown in Table 6, positive functioning was found to positively contribute to the model: ($\beta = 1.051$ $p < 0.001$, $\exp(\beta) = 2.861$, McFadden's pseudo $R^2 = 0.182$). With an effect size of 18%, the estimated odds ratio favored an increase of nearly 186% in participants' beliefs that they were meeting their educational goals for each unit increase in positive functioning. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 16.602$, $p = 0.002$. *Hypothesis 1(c)* was supported by the data.

Table 6

Summary of Logit Regression Models for PF-W Predicting SSM/Vs' Perceptions of Meeting Academic Goals

Predictor	β	SE	df	e^{β} [CI]
Intercept	-4.729	1.537		2.861
PF-W (Positive Functioning)	1.051***	0.219		[1.840, 4.265]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	175.520			
Final	143.490	32.029***	4	0.182

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$, N.S. = Not Significant

Hypothesis 2(a) stated that positive college/university environment would predict GPA. The researcher ran an ordinal logistic regression analysis to investigate the role SSM/Vs' perceptions of campus environment played in their cumulative GPA. Perceptions of campus environment were not found to contribute to cumulative GPA in the model ($p = 0.940$). Follow-up parallel regression analyses demonstrated that the null hypothesis proportionality held, $p = 0.150$. *Hypothesis 2(a)* was not supported by the data. However, the control variable of age was considered significant ($p = 0.037$).

Hypothesis 2(b) stated that positive college/university environment would predict SSM/Vs' beliefs that they are on time towards program completion. The researcher ran a binary logistic regression analysis to investigate the role that SSM/Vs' perceptions of campus climate played in their beliefs that they were on time towards program completion. Perceptions of university/college environment did not contribute to the model ($p = 0.068$). *Hypothesis 2(b)* was not supported by the data.

Hypothesis 2(c) stated that positive college/university environment would predict SSM/V's beliefs that they are meeting their academic goals. The researcher ran a binary logistic regression analysis to investigate the role perceptions of campus environment played in SSM/Vs' beliefs that they were meeting their academic goals. As shown in Table 7, positive perceptions of campus climate were found to positively contribute to the model: ($\beta = 0.349$, $p = 0.007$, $\exp(\beta) = 1.417$, McFadden's pseudo $R^2 = 0.063$). With an effect size of 6%, the estimated odds ratio favored an increase of 42% in the belief that participants were meeting their educational goals for each unit increase in perceptions of positive campus climate. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 11.053$, $p = 0.026$. *Hypothesis 2(c)* was supported by the data.

Table 7

Summary of Logit Regression Models for Perceptions of Campus Environment Predicting SSM/Vs' Perceptions of Meeting Academic Goals

Predictor	β	SE	df	e^{β} [CI]
Intercept	-1.733	1.233		1.417
Perceptions of Campus Environment	0.349**	0.128		[1.078, 1.791]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	175.520			
Final	164.470	11.053*	4	0.063

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$, N.S. = Not Significant

Hypothesis 3(a) stated that positive sense of belonging would predict SSM/Vs' cumulative GPA. The researcher ran an ordinal logistic regression analysis to investigate the role a sense of belonging played in SSM/Vs' cumulative GPA. A sense of belonging was not found to contribute to cumulative GPA in the model ($p = 0.550$). Follow-up parallel regression analyses demonstrated that the null hypothesis proportionality held ($p = 0.105$). *Hypothesis 3(a)* was not supported by the data. However, the control variable of age was found to be significant ($p = 0.037$).

Hypothesis 3(b) stated that positive sense of belonging would predict SSM/Vs' beliefs that they were on time towards program completion. The researcher ran a binary logistic regression analysis to investigate the role that SSM/Vs' sense of belonging played in their beliefs about being on time towards program completion. As Table 8 shows, sense of belonging was found to positively contribute to the model: ($\beta = 0.300$, $p = 0.004$, $\exp(\beta) = 1.348$, McFadden's pseudo $R^2 = 0.060$). With an effect size of 6%, the estimated odds ratio favored an increase of nearly 35% in the beliefs of participants being on time towards program completion for every unit increase in sense of belonging. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 13.808$, $p = 0.008$.

Hypothesis 3(b) was supported by the data.

Table 8

Summary of Logit Regression Models for Variables Predicting Sense of Belonging and SSM/Vs' Beliefs About Being On time

Predictor	β	SE	df	e^{β}
Intercept	1.711	0.977		1.348
Sense of Belonging	0.300	0.104		[1.085, 1.618]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	230.670			
Final	216.860	13.808**	4	0.060

Note: Controls are age and gender (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. N.S. = Not Significant

Hypothesis 3(c) stated that positive sense of belonging would predict SSM/Vs' beliefs that they are meeting their academic goals. The researcher ran a binary logistic regression analysis to investigate the role that SSM/Vs' sense of belonging played in their beliefs that they were meeting their educational goals. As Table 9 shows, sense of belonging was found to positively contribute to the model: ($\beta = 0.476$, $p < 0.001$, $\exp(\beta) = 1.610$, McFadden's pseudo $R^2 = 0.110$). With an effect size of 11%, the estimated odds ratio favored an increase of 61% in the belief the participants were meeting their educational goals for each unit increase in sense of belonging. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 19.253$, $p < 0.001$. *Hypothesis 3(c)* was supported by the data.

Table 9

Summary of Logit Regression Models for Sense of Belonging Predicting SSM/Vs' Beliefs of Meeting Academic Goals

Predictor	β	SE	df	e^{β} [CI]
Intercept	-2.20864	1.22718		1.610
Sense of Belonging	0.47626***	0.12573		[1.228, 1.982]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	175.520			
Final	156.260	19.253***	4	0.110

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. N.S. = Not Significant

Thus, the regression analyses identified the following predictor variables as influencing academic performance in SSM/Vs: (a) positive functioning predicted all academic performance indicators (GPA, perceptions of being on time, beliefs about meeting academic goals), (b) positive college environment predicted beliefs of meeting academic goals, (c) sense of belonging predicted positive perceptions of being on time and meeting academic goals, (d) when age as a control variable was entered into the models it significantly predicted GPA when examining positive college environment and sense of belonging (where older SSM/Vs reported greater GPAs than younger SSM/Vs).

Confirmatory Factor Analysis

The researcher examined the 8-factor structure (utilizing a composite) of the 29 items in the PF-W (as a reminder to the reader, the 9th factor on positive physical environment associated with the original version of the PF-W was removed in the present study). This step involved running 10,000 bootstrapped samples on the data to evaluate the overall goodness-of-fit criteria for the model. A maximum likelihood (ML) with robust standard error (SE) and chi-square (χ^2) estimation method (MLM) was used to assess the fit of the hypothesized model to the data. Specifically, the researcher used the chi-square goodness-of-fit test (χ^2) as well as the comparative fit index (CFI), the standardized root mean square residual (SRMR), the root mean square error approximation (RMSEA), Tucker-Lewis index (TLI), and the Akaike information criterion (AIC). Although criteria for favorable fit indices vary among authors, recommendations for assessing an acceptable model fit include an RMSE close to 0.06 or less, SRMR close to 0.08 or less, CFI and TLI close to 0.95 or greater, and chi-square/over degrees of freedom (χ^2 /df) should range from 1–3 (Brown, 2006). Table 10 shows the 1-factor robust CFA model suggested a good fit for the data: $\chi^2 = 38.064$, $p < 0.009$, χ^2 /df = 1.903 CFI = .969, TLI = .957, SRMR =

0.045, RMSEA = 0.067. The findings suggest the covariance matrix of the hypothesized positive functioning model fit the observed covariance matrix of the data and confirmed Donaldson (2019) and Donaldson and Donaldson's (2021) general factor model manifested by nine dimensions (in this case eight dimensions). Figure 4 shows that several of the factor loadings (regression coefficients) were excellent (e.g., positive meaning = 0.903; positive accomplishment = 0.888; positive emotion = 0.845; positive mindset = 0.828; & positive relationships = 0.786) as well as being highly significant ($p < 0.001$). The remaining factor loadings were very good to fair. According to Tabachnick and Fidell (2007), typically factor loadings above 0.71 are considered excellent, 0.63 are very good, 0.55 are good, 0.45 are fair, 0.32 are poor, and loadings below 0.30 are not interpreted. Additionally, please see Table 11 which provides further details on the unstandardized loadings and standard errors.

Table 10

Goodness-of-Fit Indicators of PF-W Positive Functioning Model

Variable	df	χ^2	RMSEA	CFI	TLI	AIC	SRMR	χ^2 / df
PF-W (Positive Functioning)	20	38.064**	0.067	0.969	0.957	4337.045	0.045	1.903

Note: * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Figure 4

Confirmatory Factor Analysis Utilizing Composite Scores of PF-W Scale

Table 11

Unstandardized Loadings (Standard Errors) and Standardized Loadings for Confirmatory Factor Model of the PF-W Scale

Variable	Unstandardized	Standardized	SE
1. Positive Emotion	1.000	0.845***	0.000
2. Positive Relationships	0.804	0.786***	0.059
3. Positive Engagement	0.438	0.471***	0.089
4. Positive Meaning	1.016	0.903***	0.065
5. Positive Accomplishment	0.869	0.888***	0.066
6. Positive Mindset	0.649	0.828***	0.066
7. Positive Physical Health	0.577	0.58***	0.076
8. Positive Economic Security	0.718	0.511***	0.081

Note: * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Thus, the study confirmed the factor structure of the PF-W as reported by Donaldson (2019) and Donaldson and Donaldson (2021) on all fit indices containing all PF-W items measured.

Qualitative Data Analysis

The researcher used a thematic approach to analyze qualitative data as suggested by Miles and Huberman (1994). The data were grouped into categories through the process of coding from the participants' responses to the open-ended question on the survey (i.e., "Finally, what can this college/university do or offer to better meet any of your needs?"). One hundred and ten (58%) of the participants provided responses to the open-ended question.

Through constant comparison (Glaser, 1965), descriptive codes were categorized into five main themes, namely: 1). Need for peer support 2). Concerns regarding faculty and staff 3). Challenges with institutional bureaucracy, services, and navigating benefits 4). Challenges with the sudden shift from on-the ground learning to online learning due to COVID-19. 5). SSM/Vs' satisfaction with their colleges/universities and/or VRCs.

The first theme was the desire for greater peer-to-peer support. Many SSM/Vs noted the need for peer-to-peer support through "buddy programs," specific clubs, and retreats. There was some expressed concern that it was difficult to relate to nonveteran peers. Females SSM/Vs also desired the support of other female SSM/Vs. See Table 12 for illustrative quotations.

Table 12

Illustrative Quotations for Peer Support

"Offer more veteran peer-to-peer programs."
"I think putting new veteran students in touch with veterans that have been in school longer to help them and give them advice especially about how to stay on top of your schoolwork while dealing with emotional/mental issues that come with transitioning out of the military. I felt very disconnected and lost after I transitioned out of the Marine Corps and having someone that knew what I was going through would have really helped me out."
"I would like to see more clubs. Honestly shocked to see a lack of variety when it comes to clubs at this university. Most of the clubs are cultural or ethnic related, but this campus could benefit from a veterans' club. That would be awesome."
"Help give military members a place to meet like a Frat/Sorority, or other academic group."
"The student organizations are primarily geared to a younger generation as they should be; a new organization is practical for seniors — 50 plus should be explored."
"It is difficult to connect with people who are not veterans due to the age gap."
"Offer more meetings, lunch-ins, fun events exclusive for Veterans. The services available are mostly unknown, which is horrible considering how much we pay."

“[Have a] veteran orientation/retreat to build a team of student veterans.”
“One thing I would enjoy is a way for veterans to communicate with each other similar to a canvas course set up, so we can keep in contact/talk to each other in a professional way. It would be more comfortable than sharing personal contact information, but still give us a way to get to know each other.”
“Maybe have a buddy program or connect female vets with other female vets going to school. I was the only female in my orientation and felt singled out a bit.”
“I’m a female veteran and having other female vets to ‘buddy’ up with would have been a smoother transition back to college. Being that I was the only female veteran at the orientation, I was singled out, not on purpose but only because the VRC rep coordinator was a civilian and didn’t realize what she did. Many female vets haven’t been around from the many occasions I have visited the VRC. Maybe having a stronger program on getting female vets into the VRC for services would help out. We are a community often not focused on and maybe practices and policies can change to help recruit more female vets at the VRC. It’s still an intimidating feeling to be surrounded by nothing but male vets. It’s something I was used to in the Marines and can handle my own, but I have met female vets at the VA that are not so comfortable being the only female vet around.”

The second theme involved the need to feel better supported and understood by faculty, staff, and the institution. Students repeatedly noted that they wished staff and professors better understood the needs of SSM/Vs with disabilities and mental health issues. See Table 13 for illustrative quotations.

Table 13

Illustrative Quotations for Concerns Regarding Faculty and Staff

“Have full time staff that supports the veteran community.”
“Show support to veterans and issues with PTSD instead of treating us like normal students, tell teachers to be less strict with things for a better class experience.”
“[Have] more staff and counselors properly trained to help the growing number of veterans returning to school.”
“Provide mental health care for combat vets.”
“It’s easy to feel lost an[d] unaccounted for at this school, but I figure that is just the nature of the college experience.”
“More presence of services/programs/resources or events provided to the student military/veteran community and recognition of students in the community.”
“Understand more about the veterans in their classes so they can see sometimes we have emotional breakdowns due to our disabilities.”
“More outreach groups for veterans centered around mental health. I’ve been suicidal several times during my college career.”
“I do not feel like having and expressing any conservative viewpoints is acceptable on campus. I am often forced to listen to political speech in class but am afraid of speaking my opinions for fear of retaliation.”
“[Instructors] to stop indoctrination and be really open to free speech. That is not their function. Their function is to educate, not to cater to me. They should respect diversity of thought as much as they worship diversity of gender, race, ethnicity, and sexual orientation.”

The third theme involved navigating the VA GI Bill benefits (i.e., bureaucratic issues) and the institutional challenges around services and benefits. Examples included courses being cancelled on a last-minute basis and not getting enough credit hours, therefore impacting the benefits, and not having priority enrollment or being able to get the classes needed per the degree

plans that were approved by the VA. There were expressed desires for specialized academic counselors who understood the SSM/V experience and how to navigate the benefits along with degree planning. See Table 14 for quotations:

Table 14

Illustrative Quotations Regarding Navigating VA GI Bill Benefits

"Make it easier for veterans with a disability rating to be able to get special services in a timely manner without making the process a bureaucracy."
"Be more proactive with veterans. It seems the Veterans Office is no help other than filing whatever paperwork they need to so they can get paid by the GI Bill. Student veterans are on their own to navigate degree plans, course schedules, anything else that they need help with."
"More class options to help veteran students get full time status and less class canceling. I have had my finances and schedule devastated several times due to cancelations and its always at the last second. Often times a single 1 credit hour course is needed to get 12 credit hours, for vets we don't have the ability to take a class unless it's on our degree plan. The housing allowance is awarded in stages so even 1 credit hour short can equate to a loss of almost 700 dollars a month. More consistent start and stop dates for the semesters would help to. Its typically 2 months of full housing allowance followed by a half payment. This causes me to have to do side job or have an income to survive, this coincides with the timing of finals and makes getting great grades that much harder, especially in condensed summer classes."
"Explain the procedure on how to receive our educational benefits. I had to learn how on my own and it is still very confusing."
"Better communication with the academic counselors for requirements, GI bill specific needs, and transfer procedures."
"I think veterans should be given a special extension on max credit hours. I have had three friends failed out of university because they reached their max credit hours. Universities should understand that sometimes veterans have to navigate through degrees."
"Smoother access to VA counselor(s) and program(s)."
"MOS [military occupational specialty] specific transferable credits from military training and certifications documented by either awards or Joint Service Transcripts. I was a prior combat medic (Corpsman) and felt there should have been an easier transition into becoming a EMT/Paramedic which is what I know I want to do with my life beside my real world experience, yet I've found it very difficult for the staff to point me in the right direction or at least a point of contact for the program offered at this college."
"Explain how the payments are made to the student/veteran, it's not very clear how much a veteran can receive from the VA while enrolled."
"Have some sort of point of connection such as a counselor or advisor at every campus. Doesn't have to be a full veteran resource center and a full staff that helps out with benefits and planning as such, but at least somebody to help veterans at every campus receive the resources they inquire about."
"Schedule some of the veteran's events in the evenings or weekends so I can attend. With working full-time, I don't get to participate in any of the events because they are always on weekdays in the middle of the day."
"Extend the hours of operation for the VRC"
"Provide more [veteran] resources and services."
"Hold the veteran events after work hours instead of the middle of the day, some of us have jobs!"
"Force incoming veterans at your university to take a course where they are informed on the university and services available to them as veterans/students. This is a process for incoming freshmen but not veterans which is hard to understand considering their issues getting acquainted with a very new environment. This would help bring awareness to veterans and what is provided for them and help them meet with other veterans going through the same difficult scenario."
"Have a veteran specialized advisor. I usually have questions that are both geared towards the knowledge an advisor has while also being geared towards GI bill related issues."
"Allow veterans priority in pre-registration for classes. I'm about to be a senior in a few weeks and I need to take ENGL 210 before my senior design classes, meaning I have to get it done this fall semester to avoid pushing my graduation back a semester. At the time of my pre-registration time slot, there were no seats available in this class, so now I'm in quite a predicament."

The fourth theme was around the sudden shift to online education due to COVID-19. Many students who contributed to this open-ended question expressed frustration with how unprepared the institution and faculty were for the shift to online learning formats. They noted discontent with online learning and perceived a decrease in quality of the educational experience and a lack of institutional organization. Students wished for better communication from faculty, particularly in the online space. See Table 15 for quotes that exemplify the experiences.

Table 15

Illustrative Quotations Regarding the Shift to Online Learning During COVID-19

"I know it was a difficult transition for the staff but the online classes I have taken during the pandemic have been of a much lower quality than the in-person classes."
"Online only is very hard for me, I do much better in a classroom environment."
"More assistance helping with online classes caused by COVID-19."
"Offer credit/no-credit options for all courses until a complete restoration of normal, in-person campus operations."
"I would like more face to face classes available when COVID-19 is over."
"Consolidate and standardize online classes into a single uniform system, with teachers that want to teach classes. The veterans' services are fine, but the real issue has been inconsistency across teachers in holding online classes and posting assignments in a separate place for every class. Having to find assignments in three different locations, and submitting them in duplicate or not knowing when to do so has been the worst part of this whole thing; I was a 4.0 GPA student before, and now I'm missing assignments left and right, and it's very stressful and doesn't help depression a bit."
"Better online accommodations, i.e., setting up programs that are more interactive for the learning environment. More meaningful communications with professors."
"Enforce better online communication with professors."

Finally, SSM/Vs' comments regarding satisfaction with their respective colleges/universities and/or VRCs are highlighted in Table 16.

Table 16

Illustrative Quotations Regarding General Satisfaction

"Currently I am satisfied with my university."
"It has exceeded my expectations."
"They do pretty good. I'm older w/a family. So social events are a low return option. They've carved out a couple of vet-specific areas for academic and socializing. I don't really use them, but others do."
"The university has been great so far."
"Veterans resources has been extremely helpful by providing a more direct line solving any issues with VA. The college is doing an excellent job in my opinion."
"I find what the school does meets my needs and I would have nothing to change at this time."
"Nothing at the moment; the service at this college has been great."

"I believe this college is doing great when it comes to veteran services."
"I don't have needs that I cannot fulfill myself. Anything that I do need help with however, is easily handled by faculty and staff."
"They're doing a good job. I don't need anything else."
"This college is a very good school. I have no recommendations."
"So far, every need of mine has been met. I feel the VRC has gone above and beyond and I would be worse off today without them."

Summary of Findings

Through the responses by SSM/Vs to the open-ended question about how their colleges/universities could be better meeting their needs, the students expressed many positive sentiments. The positive attributions corroborate the student satisfaction scores with regards to the VRCs and overall college/university programming for SSM/Vs as noted in the descriptives. Their concerns with the shift to online learning also matched their ratings of the transitioning going moderately well (as opposed to very well). Overall, most of these students perceived themselves as doing well in their academic performance. The results from the regression models also demonstrated the importance of SSM/V positive functioning in predicting overall academic performance. However, the themes from the open-ended items also suggested that there are areas that need further attention and improvement as far as institutional practices. Particularly with regards to IHL's offering SSM/Vs increased resources through a coordination of services, peer-to-peer extra-curricular activities, easing the institutional bureaucracies involving the GI Bill, and greater appreciation of SSM/Vs' circumstances by faculty and staff.

Post Hoc Analyses and Results

Since the sample contained community colleges and 4-year institutions, the researcher was interested to see on a post hoc basis if there were differences in SSM/Vs' positive functioning as well as academic performance based on institution type. The rationale to examine institution type was partly based on data from Cate (2014) representing Student Veterans of America (SVA). Cate (2014) found that community colleges have the largest numbers of

SSM/Vs since these institutions offer technical certificates, degrees, and enable students to transfer to 4-year colleges/universities. Furthermore, although the data with regards to SSM/Vs' academic outcomes at community colleges have been unclear, there has been some data through the use of the GI Bill that suggested that degree attainment for SSM/Vs in community colleges was not as high as for those SSM/Vs enrolled in 4-year institutions (Marcus, 2017) and their GPAs may be lower (Semer & Harmening, 2015). For analyses, the college/university type variable was collapsed into two binary categories, either four-year college/university or community college. The "other" category was removed from the analyses (only had one participant response) as was the "public two-year college/university (non-community college)" category (only had one participant response). A Levene's Test for Homogeneity of Variance demonstrated unequal variances $F = 10.945$ ($p < 0.001$), so a nonparametric ANOVA was run. As Table 17 shows, a Kruskal-Wallis was computed and found that those SSM/Vs enrolled in 4-year institutions had positive functioning levels that differed significantly from those in community colleges: ($H(1) = 9.356$, $p = 0.002$, $\eta^2(H) = 0.043$). A post hoc Dunn test using Bonferroni to evaluate pairwise differences among the two groups showed evidence that SSM/Vs enrolled in 4-year institutions had a higher median level of positive functioning when compared to SSM/Vs enrolled in community colleges (Median $_{4\text{-year institutions}} = 5.594$, Median $_{\text{community colleges}} = 5.155$, $p = 0.002$).

Table 17

Post Hoc Kruskal-Wallis Results Using PF-W as the Criterion

Predictor	N	χ^2	df	Mean Ranks	SD
College/University Type	195	9.356**	1		
0	94			85.190	1.126
1	101			109.930	0.756

Note: N = 195, * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

A post hoc analysis was also conducted to see if institution type would predict SSM/Vs' GPA. As Table 18 shows, an ordinal logistic regression was computed and GPA was found to positively contribute to the model: ($\beta = 0.786, p = 0.002, \exp(\beta) = 2.19$, McFadden's pseudo $R^2 = 0.023$). With an effect size of 3%, the estimated cumulative odds ratio indicates that those SSM/Vs in a 4-year college/university would have 2.19 times higher GPAs than those in community college. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 16.316, p = 0.003$. The control variable of age was found to be significant ($p = 0.044$).

Table 18

Post Hoc Summary of Ordinal Logistic Regression Models for College Type Predicting Cumulative GPA

Predictor	β	SE	Wald	e^{β} [CI]
Intercepts				
1.89 and below 1.90-2.24	-1.831	1.425	1.652	
1.90-2.24 2.25-2.59	-1.250	1.390	0.809	
2.25-2.59 2.60-2.89	0.059	1.365	0.002	
2.60-2.89 2.90-3.24	0.572	1.365	0.176	
2.90-3.24 3.25-3.59	1.388	1.367	1.031	
3.25-3.59 3.60-3.84	2.317	1.372	2.850	
3.60-3.84 3.85-4.0	3.355	1.380	5.907	
College/University Type	0.786	0.260	9.122**	2.193 [1.317, 3.679]
Model Fit				
	-2 Log Likelihood	χ^2	df	McFadden R^2
Null	704.212			
Final	687.896	16.316**	4	0.023

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. N.S. = Not Significant

A logit regression was completed on institution type, from which beliefs about being on time was not found to positively contribute to the model. The institution type did predict SSM/Vs' beliefs of meeting their academic goals, Table 19 shows a logit regression was conducted and perceptions of meeting academic goals was found to positively contribute to the model: ($\beta = 2.321, p < .001, \exp(\beta) = 10.18$, McFadden's pseudo $R^2 = 0.167$). With an effect size of 16%, the estimated odds ratio indicates a 918% increase in likelihood that SSM/Vs enrolled in 4-

year college/universities have higher perceptions of meeting academic goals than those in community colleges. When comparing the null model to the hypothesized model, there was a significant difference from the null model with $\Delta\chi^2(4) = 29.033, p < 0.001$. However, this finding needs to be interpreted with caution given imbalances in the number of responses for each group.

Table 19

Post Hoc Summary of Logit Regression Models for College/University Type Predicting SSM/Vs' Perceptions that They Are Meeting Their Academic Goals

Predictor	β	SE	df	e^{β}
Intercept	-0.431	0.962		10.188
College/University Type	2.321***	0.560		[3.762, 35.729]
Model Fit	Resid. Dev.	χ^2		McFadden R^2
Null	174.100			
Final	145.070	29.033***	4	0.167

Note: Controls are gender and age (omitted from the table). β = Beta coefficient. SE = Standard Error, p = probability value, e^{β} = exponentiated β . CI = Confidence Intervals. * $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. N.S. = Not Significant

Combat experience was also examined on a post hoc basis to see if it would predict positive functioning and any of the academic performance indicators. The justification for looking at combat experience is based on several prior studies on the negative impact of combat, particularly with regards to injuries associated with combat zone exposure (i.e., the physiological, psychological, physical, and social [relational] sequelae) (see Chapter 2). Studies have indicated that the most common or “signature” injuries or “invisible wounds” such as PTSD and TBI are associated with the recent U.S. military involvement in Iraq and Afghanistan as previously mentioned, Barry and colleagues (2012) found having PTSD in this student population is correlated with lower academic performance and has presented barriers to college persistence.

In order to add power to the analyses, the combat experience variable was collapsed from the number of combat deployments (0, 1–2, 3–4, 5–6, or 7 and over) into binary categories, either zero or one or more deployments. A linear regression analysis was run to investigate the

role that combat experience played on SSM/Vs' levels of positive functioning. Combat experience was found to not play a significant role in the level of positive functioning by the current sample of SSM/Vs. However, the control variable of age was significant ($p = 0.040$). An ordinal logistic regression analysis was run to investigate the role combat experience played in SSM/Vs' cumulative GPA. Combat zone experience was not found to contribute to the model. Finally, binary logistic regression analyses were run to investigate the role combat zone experience played on SSM/Vs' beliefs that they are on time towards program completion and meeting academic goals, and neither played a significant role within this sample.

The next and last chapter provides an interpretation of the findings along with a discussion of the study limitations. Recommendations for institutional administrators and areas for future higher education research are also included.

Chapter 5: Discussion

This study had several general objectives. First, and foremost, it aimed to add to the literature regarding SSM/Vs through an empirical quantitative study. SSM/Vs have been a growing population in higher education and bring unique circumstances to their college campuses, but they have been vastly understudied. Second, the study aimed to contribute to the knowledge base of human positive functioning. Third, the examination of well-being in SSM/Vs has received little attention, outside of three known empirical studies (Umucu, 2017; Umucu et al., 2018, 2019). Fourth, although the present study did not intend to generalize the findings to SSM/Vs outside of the sample (based a convenient sampling approach), it does shed light on some of the experiences of SSM/Vs from seven institutions that participated. The SSMV/s that participated in this study showed high positive functioning, above average cumulative GPAs, perceptions of being on time towards degree completion and beliefs of meeting academic goals.

The dissertation also had specific objectives. One was to test predictions of the following: relationships between SSM/Vs' positive functioning, their perceptions of positive college/university environment, and sense of belonging on academic performance. The second specific objective was to confirm the factor structure of the PF-W scale (Donaldson, 2019; Donaldson & Donaldson, 2021). As mentioned, the PF-W scale is a valid instrument of positive functioning that had not been used to evaluate a sample of SSM/Vs until now. In the present study, the PF-W scale was found to be a highly reliable and valid scale that can be used to measure positive functioning in SSM/Vs. As previously stated, this finding coincides with a similar finding regarding the PERMA-Profilier (Butler & Kern, 2016), which was also found to be a valid measure of well-being in SSM/Vs. However, to remind the reader, the PF-W scale is

PERMA+4 and thus considered to have additional building blocks that further the definition of well-being.

In confirmation with the first set of hypotheses (1a–c), the findings indicate that positive functioning in this sample of SSM/Vs is an important predictor of academic performance across all domains of academic performance, i.e., GPA, perceptions of being on time for program completion, and beliefs of meeting academic goals. The greatest proportion of variance explained came from positive functioning predicting meeting academic goals which represented 18% of the variance, with smaller effects for GPA (2% of the variance) and beliefs about being on time towards program completion (7% of the variance explained). The findings support the literature on college student well-being as a significant predictor of academic achievement in college students (Coffey et al., 2016).

Interestingly, only hypothesis 2c's perceptions of a positive college/university environment predicted one aspect of academic performance: SSM/Vs' beliefs of meeting their academic goals, with 6% of the variance explained. Welcoming campus environments have been associated with positive learning, development, and persistence outcomes in college students (Lundberg, 2014; Museus & Maramba, 2011). Therefore, it was expected that SSM/Vs' positive perceptions of the college environment would yield greater predictive effects across all academic performance indicators, but the data did not reveal this. Some plausible explanations for the data not fully supporting the hypotheses could be that there were only two items in the survey (e.g., "This college/university feels welcoming towards me as a student service member/veteran" and "Faculty, administrators and staff at this college/university go out of their way to support student service members/veterans like me") that addressed positive perceptions of college environment and therefore may not have fully captured the construct. Additionally, student academic success

in general is not solely dependent on the college/university environment, but also depends on various individual student characteristics such as educational aspiration and campus involvement (Astin, 1984), perceptions of having academic control (where students believe they can influence their academic outcomes) (Hall et al., 2006; Perry, 2003) as well as having higher levels of hope beyond intelligence and natural abilities (Barlow, 2002; Curry et al., 1997) to name a few.

Hypotheses 3a–c predicted that sense of belonging would be significantly related to academic performance. This was partially confirmed in that SSM/Vs' sense of belonging predicted their perceptions of being on time (with 6% of the variance) and beliefs of meeting academic goals (with 11% of the variance explained), but not GPA. This finding somewhat confirms the extant literature on belonging being related to academic progress and achievement (Freeman et al., 2007). However, it also supports recent findings that belonging did not predict persistence in college students when motivational attitudes were considered (Morrow & Ackermann, 2012). Like campus environment/climate, there may be additional individual factors beyond sense of belonging that may play larger role in academic performance in terms of GPA. For example, as far as additional individual factors, personality traits could be stronger predictors of academic performance. Conscientiousness as one of the components of the Big Five personality traits has been found to be a strong predictor of well-being (McCrae & Costa, 1991; Steel et al., 2008), which could then lead to improved academic performance. The Big Five personality traits have been found to be associated with flourishing in SSM/Vs (Umucu et al., 2019) using the Flourishing Scale (Diener et al., 2010). Additionally, since positive functioning is multidimensional in nature, it would make sense that positive functioning could predict all indicators of academic performance, where campus environment and sense of belonging are unidimensional and not able to reflect a more holistic perspective of academic performance.

Age as a control variable seemed to play a role in this study. For instance, age remained a predictor when measuring SSM/Vs' GPA and their sense of belonging and campus environment. These results suggest age accounts for unique variation in SSM/Vs' cumulative GPA that was not captured by their perceptions of belonging and campus environment; and where older SSM/Vs' in this sample outperformed younger ones. The finding on age and GPA supports prior research that indicates non-traditional age students (25 and over) have higher GPAs than traditional age students (23 years of age and under) (Spitzer, 2000). On the other hand, gender as a control variable had no effect on the findings. This did not support the literature on female SSM/Vs having greater academic outcomes than male SSM/Vs. However, the lack of gender-based differences in this sample could be a function of the lower subsample of women (27.6%). Women veterans are often underrepresented in the literature as are other military/veteran minority groups.

It is also important to consider that this study took place during the inception and continuance of COVID-19. The SSM/Vs in this sample reported moderately adjusting ($M = 3.16$, $SD = 1.31$) to online learning given the safety protocols of social distancing that did not allow for on-campus traditional learning. Students' open-ended responses showed their frustration with how the IHLs were managing (or mismanaging) the sudden switch to online education as a response to the pandemic. Although there is no current research on the impact of COVID-19 in higher educational settings, it can be surmised that the sudden transition to online learning for many students and faculty alike would be a stressful experience (in addition to the stress caused by the global pandemic). However, SSM/Vs may be differentially impacted by the lack of institutional organization and preparedness that the pandemic created on college campuses as part of military culture involves having very clear structures and detailed oriented directions

(Soeters et al., 2006). The loss of structure in campuses across the country was only exacerbated by the public health crisis. In fact, the loss of the structure associated with military life has been identified as a challenge for SSM/Vs as they transition into higher education (Arminio et al., 2015; Livingston et al., 2011). Another theme from an open-ended response was the expressed desire for greater SSM/V peer-to-peer interaction. This would be expected given that an essential component of military culture involves group/unit cohesion or collectivism (McGurk et al., 2006). The loss of collectivistic culture in academic environments that promotes individualism has also been identified as creating cultural dissonance for SSM/Vs as well as the sense of loss of comradery and the corresponding experience of increased social isolation/alienation (Arminio et al., 2015). Additionally, Gwin et al. (2012) posited that SSM/V retention improves with veteran-to-veteran peer support and mentorship. According to Ness et al. (2015), positive social relations and peer-to-peer assistance have been correlated with academic motivation and mastery among SSM/Vs. Perceived positive peer social relations may also attenuate PTSD symptoms (Ness et al., 2015).

Another theme that emerged from the comments provided by SSM/Vs suggested that they felt misunderstood by staff and faculty and could not easily relate to nonveteran peers - both themes suggested in the extant literature. For instance, this finding supports the study by McBain and colleagues (2012) that was previously mentioned, where the authors found that the most significant issue for SSM/Vs is the “social acculturation to a civilian college campus” (p. 24). Also, the difficulties of navigating the bureaucracy of higher education was expressed and this is not exclusive to SSM/Vs as other students also experience the same issue (Vacchi, 2012). However, the bureaucratic challenges are heightened for SSM/Vs through their utilization of the GI Bill benefits and for those in active duty status or those in the National Guard and Reserve

who need to meet service obligations while they are attending college, such as having to deploy or participate in military related trainings that significantly interrupt their studies (Arminio et al., 2015). Despite the challenges, SSM/Vs in this study were generally satisfied with their institutions and with services provided by the VRCs. This speaks to the strengths of the SSM/Vs in this sample as well as the institutions that serve them.

The next section of the chapter discusses several limitations with the present study and recommends areas for further investigation.

Limitations and Additional Areas for Further Research

The study had several limitations. First, regarding COVID-19, the items in the survey (i.e., positive functioning, belonging, and campus environment) had to be framed for participants as “prior to COVID-19” how much they would agree or disagree with each statement. This required the participants to retrospectively think about their functioning before the pandemic. Since the survey was administered between March and August of 2020, some students in the latter part of August may have had difficulties remembering what life before COVID-19 was like, and this could have affected their responses. Additionally, for future studies, the long-term consequences of COVID-19 on SSM/Vs’ academic and well-being outcomes would need to be considered. In fact, prior to COVID-19, there had been a significant upward trend in general student mental health (psychological distress), substance use and behavioral issues, where data from the 2018-2019 Healthy Minds survey of 300,000 students across 300 colleges/universities found that 40% of students reported having significant mental health problems and 60% of undergraduates had problems accessing mental health care (Eisenberg et al., 2019). The impact of COVID-19 on college students is not yet fully understood, preliminary studies at the time of this writing indicate greater stress and anxiety (Son et al., 2020) and increased engagement in

sedentary behaviors and feelings of depression (Huckins et al., 2020) as compared to Pre-COVID-19 (and comparisons to the general population are not currently available).

Another limitation was the study's overall response rate being low (14.1%), as 30% is typically considered acceptable (Sekaran & Bougie, 2010). Collecting data during COVID was very challenging and the sample size could have been larger to better ensure power. Additionally, SSM/Vs may be difficult to reach populations in terms of conducting research as well as their availing themselves of services, thus the use of incentives could have been helpful. Additionally, the study did not include a question regarding time in college (or semester/units completed), that is, how long the SSM/Vs had been attending their respective colleges and what credits they had completed during that time. There could be differences that were not accounted for in terms of first semester versus midway through a program or even the last semester of a program. The first semester of college can be a difficult transition, whether an individual enrolls in a community college or in a 4-year IHL. There are seminal theories and studies (Tinto, 1996; 2001) on the challenges associated with successful college integration and the risks with regards to persistence, particularly for first-year college students. The success of transfer students from community college to a 4-year institution would also need to be parceled out. Additionally, according to the post hoc analyses, there may be differences between SSM/Vs and their positive functioning and academic performance depending on college type (community college versus 4-year institutions). However, given the limited sample size in the current study and the lack of random sampling of colleges, these results need to be interpreted with caution and are only helpful in terms of guiding future areas of research. The post hoc analyses and findings also indicated that combat experience did not make a difference for this sample in terms of their positive functioning or academic performance. This is yet another area that requires a larger

sample size and broader representation of number of combat-related experiences and whether the experiences resulted in injuries and disabilities, which were not at all investigated in the current study. The only question that was asked was if SSM/Vs' were receiving or in need of therapy for emotional problems such as PTSD or substance use, and most did not report having or needing services. There were no items inquiring about mental health stigma and help-seeking, nor were there questions about service-connected physical or neurological disabilities. Therefore, the connection between combat experience, service-connected disability, mental health stigma and how these might impact positive functioning and academic performance is unclear. Future studies could take a closer examination of the role of combat and resulting injuries and how the injuries or disabilities predict positive functioning and academic performance.

The present study did not allow for other diversity considerations as the sample was mostly comprised of White males. While most of the military (as of 2017) is still comprised of non-Hispanic Whites, representing 57% of the armed forces, Black service members and Hispanics are growing military demographics with a combined 43% representation (Pew Research Center, 2019). This is another area that needs to be further explored as the present sample demographics are not proportional to the military's racial and ethnic minority composition, thus, these groups would need to be oversampled in future studies. A probability-based sampling approach such as the use of a stratified sample that is proportional to military demographics would make an ideal future study. One recent scoping review in the higher education literature summarized that most SSM/V-related studies lack focus on the diversity of the distinct subgroups and intersecting identities, such as gender, race/ethnicity, and being a first-generation college student (Ghosh et al., 2020; Vaccaro, Russell & Koob, 2015). For instance, student veteran identity is not just about military service, but also includes the intersecting

identities of being a parent and caregiver while attending college (Jones, 2013) among the other forms of diversity as just mentioned. One aspect that has been studied is that service members who tend to serve in infantry (combat roles) as their military occupational specialty are more likely to be Latino, come from lower socioeconomic backgrounds and have lower high school GPA's than those from families with greater resources (MacLean & Parsons, 2010). In the current study this was not able to be investigated due to the lack of diversity in the sample, however, examining the role of ethnicity, identity, military occupational specialty and socioeconomic background (including first-generation college student status) on academic performance is an area that needs further exploration. Closely aligned with the idea of intersecting identities is that future studies could make comparisons between SSM/Vs from different service eras, perhaps using secondary data (for example, how do post-9/11 SSMV's compare to SSM/Vs from other war eras on the questions of interest?). This notion links to the ecosystems perspective that would examine a veteran's sense of identity based on the social and historical aspects of their military service (Harada et al., 2002). Thus, as Bronfenbrenner (1993) posited, the chronosystem intersecting with other levels that makeup part of an entire system and how these components interact to impact the individual.

With regards to the lack of diversity, half of the IHLs that participated in this study were predominantly White-serving institutions (PWIs) with the other half being Hispanic-serving institutions (HSIs). There was no representation from historically Black colleges and universities (HBCUs), nor from Asian American and Native American Pacific Islander-serving institutions (AANAPISIs). It has been well documented at a national level that there are lower rates of persistence for underrepresented minority students, particularly for African American, Latinx, and Native Americans when compared to their White counterparts (Shapiro et al., 2017). It has

been posited that lack of diversity in college environments, discriminatory or unwelcoming practices, and lack of institutional supports may play a role (Feagin et al., 1996; Turner, 1994). Carter (2006) posited that it is important to examine the multiplicity of factors, including the contextual elements, when looking at persistence patterns for underrepresented minority students. The author went on to say, “By uncovering differences in persistence patterns across diverse groups, we can illuminate factors that inhibit equal opportunity as well as policy factors that might be able to improve opportunity” (p. 34). Thus, future studies could make comparisons between SSM/Vs and their academic performance based on not only in terms of socioeconomic status, first-generation, race/ethnicity, but also the differences between those SSM/Vs attending PWIs and HBCUs for example. Military-friendly institutions may not be enough for those SSM/Vs with intersecting identities that face additional challenges in higher education beyond or in addition to military or veteran status. Additionally, the colleges in this sample were specifically selected due to their military-friendly self-designations. Thus, future studies need to examine what makes an institution truly military friendly and how this welcoming environment impacts SSM/Vs’ academic outcomes. Comparison studies of military-friendly colleges/universities versus those IHLs without the designation would also be important to conduct.

Another limitation in this study was the cross-sectional approach. To investigate the educational trajectory of SSM/Vs, it would be necessary to conduct a longitudinal study. Vacchi and Berger (2014) suggested that research on SSM/Vs should be done through longitudinal studies with large samples; for example, the authors suggested that a study should entail “10,000 student veterans distributed over three or four cohorts and would take 7-10 years to complete” (p. 141). Vacchi and Berger (2014) also noted that numerous variables should be

considered, such as academic integration variables associated with faculty interactions. From the open-ended responses in this study, faculty and staff concerns were frequently mentioned by SSM/Vs as points of contention. In fact, there is one existing program that brings sensitivity awareness to college/university faculty and staff. The VET NET ALLY program, which began at California State University, Long Beach (and more recently replicated in other parts of the country) provides a one-time, 4-hour awareness seminar to faculty and staff on student veterans and their needs (Thomas, 2010). The program was modeled after the Safe Zone programs for creating welcoming university environments for LGBT students. Thomas (2010) conducted a small mixed-methods evaluation of the program through pre- and post-tests and found significant results, such as participants having increased knowledge of SSM/V services available on campus at post-test. Participants expressed positive responses to the seminar. However, the study did not yield significant findings across several other variables (i.e., faculty/staff attitudes towards veterans, willingness to support veterans, comfort interacting with veterans, knowledge of veterans' academic preparedness, and general knowledge about service members/veterans). A single 4-hour seminar may not be enough to shift faculty and staff attitudes or increase knowledge about the population, however, it is a very good beginning. Thus, programs like this need to be expanded, replicated, and tested to ascertain whether cultural competence types of programming for faculty and staff make a difference in SSM/Vs' attitudes with regards to their college experiences and academic outcomes.

Vacchi and Berger (2014) also recommended examining differences between career veterans (who also tend to be older) and short-term enlisted military personnel (who tend to be younger). The somewhat surprising results around age in this study may touch upon this issue of age differences in SSM/Vs, but it is only surmised, as the study did not specifically address

comparisons between older career veterans and younger enlisted personnel. An associated issue is veteran identity, that is how much do SSM/Vs' identify with being a military veteran and how does this degree of identity impact their successful transition to civilian life? As previously noted, Hamrick and Rumann (2013) hypothesized that those with higher degrees of identification with military culture/life may have more difficulties with campus integration. This is not to suggest that military identity is necessarily detrimental, but perhaps it is the SSM/V's ability to integrate identities, that of military veteran and civilian student (Zinger & Cohen, 2010) that needs to be addressed. This area would need to be empirically tested to see if a sense of military identity moderates the relationships between positive functioning, sense of belonging and campus environment on academic performance.

The literature also raises other considerations, such as non-campus influences (spouses and children) and the role they play in SSM/Vs' academic success. The students in this sample were mostly married, and the role of family as a source of psychosocial support or as an added stress has received little to no attention in examining SSM/Vs and their educational trajectories. Additionally, as evidenced in the demographics for this sample, as nontraditional students, SSM/Vs often hold jobs while they are attending college, and thus the role of employment and how that might interfere or support their education would be of importance in future studies. Additionally, SSM/Vs' finances, specifically the use of the GI Bill and additional student financial aid (federal and commercial loans), should also be investigated. Although economic security was part of the PF-W scale, (with items such as, "I am comfortable with my current income," "I could lose several months of pay due to serious illness, and still have my economic security" and "In the event of a financial emergency, I have adequate savings") it would be important to directly ask about household income. Particularly given that at least in this sample

of SSM/Vs, positive economic security had the lowest mean score (3.97 on a scale from 1-7) in relation to the other dimensions of positive functioning. And although most participants in this sample did not identify as housing insecure, 13 of them (6.5%) noted being homeless at some point during their studies, and one is too many. Food insecurity was not specifically addressed in the survey, but it is a growing concern in college campuses (Payne-Sturges et al., 2018). Additionally, food insecurity has been tied to lower GPA for community college students (Maroto et al., 2015).

Future research could also lead to a better understanding of comparisons between service branches and service components (active duty, Guard, and Reserve) (Vacchi & Berger, 2014). The present study did not allow for this type of comparison regarding most recent service branch and component, as much of the sample was comprised of those having served on active duty in the Army. The deployments to Iraq and Afghanistan have relied heavily on National Guard and Reservists, who have experienced worse health and psychosocial outcomes upon returning home than those who served in the active duty component (Harris et al., 2014; Lane et al., 2012). These service members underwent great disruptions to their lives as full-time civilians with part-time service in the military when they were activated into full-time military duty. Reserve forces had to leave their families and full-time jobs without the typical supports afforded to those in the active duty component who reside on or near military installations (Lane et al., 2012; Manderscheid, 2007). Thus, future studies should oversample this sub-population of SSM/Vs to capture a clearer picture of how they are navigating and succeeding in higher education. As mentioned, sense of belonging and positive environment only played a modest role in predicting SSM/Vs' academic performance. Perhaps the study could have targeted these two areas with the use of full instruments rather than having two representative items for each

domain. Another consideration that was posited was that individual-level factors such as personality traits and other individual states and/or traits could be further examined in terms of SSM/Vs' well-being and academic performance through a path analysis approach (Edwards & Lambert, 2007). Lastly, it is important to keep in mind that at least for traditional students, high school GPAs and standardized college entrance exam (ACT®) scores are typical and valid predictors of college GPA (Westrick et al., 2015), however, in this case, neither high school GPA's nor college entrance exams were accounted for. Thus, although PERMA+4 predicted GPA, there could be other factors that were not measured in the present study that could also account for meaningful variance (such as, aptitude, prior academic performance, and others).

Recommendations for Institutions of Higher Learning

The first recommendation is for institutional administrators and researchers to conduct an SSM/V-centered study to learn more about the population at their respective campuses. Abel et al. (2013) recommended IHLs collect data on SSM/Vs' needs in the areas of housing, academics, financial aid, disability resources, health and wellness, recreational and peer activities, as well as identifying barriers (real and potential) in accessing services, programs, and activities. Finney and Wilcox (2015) emphasized that a needs assessment be carried out that includes peer-mentorship needs. The recommendations posed by Abel et al. (2013) and Finney and Wilcox (2015) are in line with the many of the themes that emerged in the present study from the single open-ended item, where students were asked what they needed from the institution. From the student feedback it appeared that IHLs could re-evaluate their academic policies and procedures to help the students better navigate the obstacles associated with their VA educational benefits. In addition to improved faculty and staff communication, dissemination of information,

coordination of services, and increased sensitivity to SSM/V needs, there was also an expressed desire for increased SSM/V peer-to-peer engagement.

A Center for American Progress report on conducting comprehensive institutional assessments of student veterans (Griffin & Gilbert, 2012) suggested utilizing the Environmental Evaluation for Veterans Index (EEVI). This is a tool that examines services, policies, and sources of supports that are deemed necessary in assisting SSM/Vs as they transition from the military into higher education. Griffin and Gilbert (2012) explain that the EEVI is based on a thorough review of the research literature (both theoretical and practice-based) along with data from different institutions (across institutional contexts) that participated in the EEVI study. Based on the EEVI study findings, three institutional level-based assessments were identified and are quoted below:

- “Personnel and services — the existence of offices, services, and professionals that can meet and understand unique issues and concerns of student veterans.
- Institutional structures — the existence of campus policies and procedures related to administering student veterans’ information, benefits, and services.
- Social and cultural support — the extent of student veteran representation in the student body, veteran-specific groups and services, and quality of relationships between student veterans, their peers, and faculty.” (p. 3)

Griffin and Gilbert (2012) concluded that if this instrument is to make a significant impact in improving educational outcomes for SSM/Vs, several requirements should be met. For instance, colleges and universities should use the EEVI to evaluate their capacity to serve SSM/Vs and make necessary adjustments; that EEVI responses should be made public by law; and EEVI scores should be correlated with student academic and employment outcomes.

Furthermore, if conducting an institutional assessment shows that an institution needs to create or add resources in order to develop programming or services for SSM/Vs, then according to Jackson et al. (2013), campus leadership and administration can identify opportunities in the following areas. First, depending on institutional budgets, existing resources can be redirected (especially considering budget cuts commonly faced by public institutions). Second, leaders can seek out legislative support and funding. Third, leaders can create partnerships with local government offices and businesses. Fourth, leaders can seek out gifts from donors and obtain grant funding. Selber (2015) added that developing partnerships off and on campus is one of the keys to success in obtaining resources since the needs of SSM/Vs can be complex and cut across multiple domains (such as academic, health, behavioral health, career, and employment). The author identified the need for leaders to engage community, state, and federal veteran service providers and partner with a range of nonprofit organizations. Additionally, once the programs are put into place, there must be a mechanism to track outcomes and empirically evaluate whether these programs are making an impact on student success (Selber, 2015). One example of a coordinated community and university partnership is the VA's Veterans Integration to Academic Leadership (VITAL), a nationwide pilot program (Sorrells et al., 2015). VITAL provides seamless VA health care services, outreach, and on-campus counseling to SSM/Vs to improve overall mental health while supporting academic progress.

Furthermore, in line with Phillips and Lincoln (2017), it is not enough to know something about SSM/Vs. We need an empirically tested critical theory on student veterans that is built on critical and emancipatory paradigms where institutions, as they state, must "shift the conversations from broken veterans to broken systems ... and [institutions of higher education] look introspectively at their own complicity in the plight of those student veterans who are

unsuccessful and their failure to recognize those student veterans who are successful” (p. 666).

The next set of recommendations involve the utilization of positive education principles.

Positive Education Strategies

The need to understand SSM/Vs’ well-being is clearly informed by the present study given how positive functioning predicted the academic performance indicators. The SEARCH framework of the six higher-order pathways (**S**trengths, **E**mootional Management, **A**ttention and Awareness, **R**elationships, **C**oping and **H**abits and Goals) as described in Chapter 2 from the work by Waters and Loton (2019) can be used to inform programming in educational settings to boost student well-being. As the reader may recall, the framework was developed for primary and secondary schools and used to guide research and practice however, it has not been evaluated in post-secondary educational settings (nor with diverse K-12 samples). It is nevertheless a framework that could be applied in IHL’s and then empirically tested. Waters and Loton (2019) recommended professional development for teachers, staff members and administrators in school settings to learn the various SEARCH pathways and associated positive psychology interventions (PPIs) to bolster student well-being. There are many PPIs and therefore the specific interventions would need to be tailored to the school and based on student needs. For instance, in order to support the strengths pathway (per the SEARCH framework) in a student, a strengths-based approach (Lopez & Louis, 2009) or strengths-based awareness intervention (Waters & Loton, 2019) can be utilized where student talents and strengths are identified through the use of surveys and then their strengths are intentionally targeted through specific educational practices (i.e., strength use interventions) such as experiential learning activities (Anderson, 2003) that foster their strengths both inside and outside of the classroom (Seligman et al., 2005). Waters and Loton (2019) added that PPI’s are most effective when these are designed in inter-

connected ways that simultaneously bolster more than one pathway, which Rusk et al., (2018) identified in the Synergistic Change Model. For example, at the classroom level, instructors that develop and use gratitude interventions on a regular basis in their classrooms (where students express gratitude towards someone) and would boost several of the SEARCH pathways. According to Waters and Loton (2019), gratitude exercises would potentially enable a habit and goal (H) to form, help to shift students' attention (A) towards the positive aspects of their lives, build relationships (R) by being thankful towards others, influence student's emotional management (E) while simultaneously enhancing their coping (C) skills (Waters & Loton, 2019). Waters (2021) notes that while the implementation of PPIs in school-wide curricula (or even whole-school approaches) would be ideal in boosting well-being, these also present significant challenges for school personnel due to time constraints related to instructional content that needs to be covered per state or national educational standards. Thus, schoolteachers must contend with competing interests in how they use instructional time. Therefore, Waters (2021) recommends that it may be easier to have a "practice approach rather than a programmatic approach." For instance by teaching school personnel how to use PPIs such as mindfulness, self-regulation, and stress management skills to name a few, that they can apply these to their students as needed as well as be able to use the PPIs to promote their own well-being (Waters, 2011). In higher education settings, it may be more practical to infuse PPIs in classes or workshops which can be offered to all students as electives (e.g., formal class instruction on well-being), and this is already taking place at some colleges/universities around the country. Or PPIs can be integrated as part of required college freshman orientation seminars that could focus on strengths and wellness. Some colleges/universities already offer orientation programs for undergraduate SSM/Vs therefore well-being components could be added to existing orientation programs. In

fact, Hodges and Kennedy (2015) point out that PPIs including strengths-development programming exist in various facets of college life, for example, in new student orientations, sophomore experience programs, residence life, leadership courses, student-led organizations, student government and through career services. Faculty, staff members and administrators would also receive training in PPIs as professional development in addition to specific cultural competence training, in this case, with regards to SSM/Vs as was previously mentioned (e.g., the VET NET ALLY).

As PPIs emphasize emotional and cognitive strengths (Seligman et al., 2005) that serve to cultivate well-being—rather than being grounded in a philosophy of reducing maladaptive thoughts and behaviors—PPIs could also be applied through campus-based mental health services. PPIs have shown to improve psychological (Bolier et al., 2013), cognitive (Fredrickson & Branigan, 2001), and health outcomes (Pressman & Cohen, 2005). Positive psychotherapy (PPT) as espoused by Rashid (2015), is one type of therapeutic approach that is based on the principles of positive psychology more specifically on Seligman’s PERMA (2011) and “is more balanced than the traditional deficits-approach” (Rashid, 2015, p. 25). PPT is comprised of three psychotherapeutic phases. The first involves an exploration of a balanced narrative of the client’s strengths, followed by development of meaningful goals along with cultivation of positive emotions and the final phase includes the use of exercises to foster positive relationships, meaning and purpose (Rashid, 2015). Rashid (2015) states that PPT does not entail denying a client’s negative emotions but rather offers a nuanced and contextual use of client strengths and resources that are incrementally approached and applied. The author notes that pilot studies have demonstrated promising results in terms of effectiveness for mental health outcomes, however, more rigorous studies would need to be conducted. Given that PPIs are based on strengths-

enhancing perspectives, PPIs could also aid in reducing SSM/V stigma around mental health help-seeking which would also need to be further studied. Stigma and reluctance to seek mental health services has been documented as a key barrier for post-9/11 military veterans (Hoge et al., 2004). Though an expert consensus study report by The National Academies of Sciences, Engineering and Medicine (2021), traditional college counseling and support systems have not been equipped to manage the increasing mental health, substance use and other types of mental distress in college students. Therefore, the report outlines 10 sets of recommendations for creating a college/university culture of well-being for all students that encompasses an “all hands approach” (from top leadership to all segments of the campus community). The report highlights that IHLs as a whole have role and responsibility in promoting mental health and wellbeing through a “multi-pronged approach... including a focus on prevention, identification of high-risk students in a thoughtful way, effective community-based approaches, treatment services for identified cases, and relapse prevention and post-treatment support” (p. 5).

The recommendations set forth by The National Academies of Sciences (2021) fall directly in line with the notion of promoting well-being in all students, including SSM/Vs through comprehensive and coordinated campus services. Additionally, coordinated efforts to meet the holistic needs of students should include those of the offices of student affairs, advising, registration, financial aid, and disabilities, as well as campus health, mental health counseling services, and the office overseeing institutional research working in conjunction with the VRCs. Also having VA benefits representatives and/or services on campus (such as VITAL) seems to be a reasonable component of a well-coordinated approach. This holistic and well-orchestrated approach would tie to the ecosystems framework that was proposed in this study to bolster the well-being of SSM/Vs and the institutions that serve them. Perhaps this study will continue to

pave the way for PPIs for SSM/Vs in college campuses. Additionally, PPIs that target organizational culture and behaviors could also be utilized to make truly “friendly” environments for all learners. The interventions would then be evaluated to shed further light on ways to strengthen both SSM/Vs’ well-being and better prepare postsecondary institutions.

Lastly, many authors in the fields of higher education and veteran studies would concur that there needs to be a universal data tracking system that will follow SSM/Vs wherever they go, as they often move from institution to institution, regardless of how (or if) they use the GI Bill (Griffin & Gilbert, 2012; Vacchi & Berger, 2014). Ultimately, as other researchers in this area have posited, policy and practice decisions about programming provided by postsecondary educational institutions to SSM/Vs need to be based on data-driven empirical evidence. The present study adds to the evidence-base that can serve to inform future interventions to build upon SSM/Vs’ well-being and promote their successful transition into higher education and beyond.

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Appendix A

Greetings!

I hope this email finds you well.

My name is Eugenia L. Weiss and I am a doctoral student at Claremont Graduate University. I am currently collecting data for my dissertation studying post-9/11 student service member/veterans' well-being. You are invited to participate in an anonymous electronic survey. Your participation is voluntary. The survey will take approximately 20 minutes to complete and although there are no direct benefits for your participation, the findings can help institutions of higher learning (colleges and universities) better understand the strengths of student members/veterans' and in what ways universities can best support their academic needs and foster positive experiences.

Thank you for your consideration. And thank you for your help and service to our great nation!

If you are interested in participating in this study on post-9/11 student service members/veterans' well-being, please click the link below (or copy and paste it into your browser) that will direct you to the survey.

https://survey.az1.qualtrics.com/jfe/form/SV_1Uhnlgjzlm70rgF

Sincerely,

Eugenia L. Weiss
PhD Candidate, Education
Claremont Graduate University
eugenia.weiss@cgu.edu

Appendix B

You are invited to participate in a research project. Volunteering will probably not benefit you directly, but you will be helping the investigator to understand well-being in student service members/veterans. If you volunteer, you will complete an anonymous online survey. This will take about 20 minutes of your time. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Some may feel uncomfortable by some of the survey questions. Your involvement is entirely up to you. You may withdraw at any time for any reason. Please continue reading for more information about the study.

Study Leadership: This research project is led by Eugenia L. Weiss, Principal Investigator of the Claremont Graduate University, who is being supervised by Dr. Stewart I. Donaldson, Professor of Psychology and Community & Global Health, at Claremont Graduate University.

Purpose: The purpose of this research is to study post-9/11 student service members/veterans' perceptions of their well-being (or optimal functioning) and how this can inform college/university practices to support student veterans in their academic success.

Eligibility: In order to take part in this study, the participant must be a post-9/11 student service member/veteran (i.e., service members or military veterans who served on active duty in the U.S. armed forces after September 10, 2001). This includes Reserve and National Guard. Participants must also be 18 years of age or older.

Participation: During the study, you will be asked to complete a one-time online survey. This will take about 20 minutes of your time. This survey is completely anonymous, and there is no way to identify you.

Risks of Participation: The risks that you run by taking part in this study are none to minimal. These risks include feeling uncomfortable with some of the questions on the survey. Again, your participation is entirely voluntary.

Benefits of Participation: I do not expect the study to benefit you personally. The findings of this study can be helpful to inform future university practices and policies to assist student service members/veterans in their academic success.

Compensation: There is no financial compensation for your participation in the study.

Voluntary Participation: Your participation in this study is completely voluntary. You may stop or withdraw from the study or refuse to answer any questions at any time without it being held against you. Your decision whether or not to participate will have no effect on your current or future connection with anyone at Claremont Graduate University or the college/university that you are attending.

Confidentiality: Your individual privacy and anonymity will be protected in all papers, books, talks, posts, or stories resulting from this study. I may use the data I collect for future research or

share it with other researchers, but I will not reveal your identity with it. In order to protect the confidentiality of your responses, all data will be presented in the aggregate form.

Further Information: If you have any questions or would like additional information about this study, please contact the Principal Investigator, Eugenia L. Weiss at 949-433-3416 and/or email: Eugenia.weiss@cgu.edu. You may also contact Dr. Stewart I. Donaldson, Faculty Supervisor, at 909-702-7316 and/or email: stewart.donaldson@cgu.edu. The CGU Institutional Review Board has certified this project as exempt. If you have any ethical concerns about this project or about your rights as a human subject in research, you may contact the CGU IRB at (909) 607-9406 or at irb@cgu.edu. A copy of this form will be given to you if you wish to keep it.

Consent: Your agreement below by checking the YES option means that you understand the information on this form and you voluntarily agree to participate in it. If you choose to not participate, please click the NO option and the survey will close.

☐ *Yes, I am over 18 and I would like to participate*

☐ *No, I do not want to participate*

Appendix C

Part I. Please check the response that best matches how much you *agree or disagree* with each statement (prior to the COVID-19 crisis). Please answer every statement, even if it does not apply to you. If a statement does not apply to you, or if you are uncertain as to how to answer it, please check the middle response (neither agree nor disagree).

1. I feel joy in a typical day.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
2. Overall, I feel enthusiastic about my life.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
3. I can receive support from loved ones (e.g., family, friends, etc.) if I need it.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
4. When I am working on something I enjoy, I forget everything else around me.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
5. My life is meaningful.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
6. I trust people who are close to me.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
7. I lose track of time while doing something I enjoy.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
8. I feel appreciated by people who are close to me.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
9. This college/university feels welcoming towards me as a student service member/veteran.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
10. I typically become absorbed while I am working on something that challenges my abilities.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
11. I am happy with my life.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
12. As a student service member/veteran, I feel like a real part of this college/university
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
13. I typically accomplish what I set out to do in life.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
14. I have a bright future.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
15. I typically feel physically healthy.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
16. I receive help and support from others when I need it.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
17. I can really be myself at this university.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
18. My loved ones bring out my best self.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
19. I am generally satisfied with my life.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
20. The work I do serves a greater purpose.

- Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
21. I can improve my level of talent.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
22. I feel in control of my physical health.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
23. I am comfortable with my current income.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
24. I am rarely sick.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
25. I am satisfied with my personal relationships.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
26. Faculty, administrators and staff at this college/university go out of their way to support student service members/veterans like me.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
27. I set goals that help me live my best life.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
28. I could lose several months of pay due to serious illness, and still have my economic security.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
29. I feel loved.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
30. I understand what makes my life meaningful.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
31. I can typically overcome sources of physical distress (e.g., insomnia, injuries, vision issues, etc.)
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
32. In the event of a financial emergency, I have adequate savings.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree
33. I believe I will continue to develop as an individual.
Strongly Disagree 1 2 3 4 5 6 7 Strongly Agree

Part II. For each of the following questions please indicate your academic standing and college/university experience. Please select a response that best represents your current situation.

1. Do you consider yourself on time towards your program completion (for example, degree, certificate, ability to transfer, etc.)?
☐ Yes
☐ No
2. Do you consider yourself currently meeting your academic goals?
☐ Yes
☐ No
3. How is this college/university typically classified as an institution of higher learning?
☐ Public 2-year college (community college)
☐ Public 2-year college/university (non-community college)
☐ Public 4-year college/university

- ☐ Private 4-year college/university
- ☐ Other _____

4. What is your cumulative estimated grade point average (GPA) at this college/university? (Include cumulative GPA if you transferred from a community college).

- ☐ 3.85-4.00
- ☐ 3.60-3.84
- ☐ 3.25-3.59
- ☐ 2.90-3.24
- ☐ 2.60-2.89
- ☐ 2.25-2.59
- ☐ 1.90-2.24
- ☐ 1.89 and below

Part III. Please respond to the following questions regarding your background and your military service.

1. In which branch of the United States military service you have you served in? (Please check the most recent one).

- ☐ Coast Guard
- ☐ Army
- ☐ Navy
- ☐ Marine Corps
- ☐ Air Force

2. What is currently or was your most recent component?

- ☐ Active
- ☐ Reserves
- ☐ National Guard

3. What is your current marital status?

- ☐ Single
- ☐ Married
- ☐ Divorced
- ☐ Separated
- ☐ Domestic Partnership
- ☐ Widow

4. What is your ethnic/racial background?

- ☐ Asian/Pacific Islander
- ☐ Black/African American

- ☐ Hispanic/Latino
- ☐ American Indian, Alaska Native or Native Hawaiian
- ☐ White
- ☐ Bi-racial or multiracial
- ☐ Other _____

5. How many total years have you served in the military? (Including active duty, Reserve, etc.)
Number of years and months _____

6. How much time has passed since leaving the military (if applicable)? Number of years and months _____

7. What is the number of your deployments to combat zones (hazardous duty)?

- ☐ 0
- ☐ 1-2
- ☐ 3-4
- ☐ 5-6
- ☐ 7 and over

8. What is your age (as of your most recent birthday)? _____

9. What is your current enrollment status at this college/university?

- ☐ Enrolled as a student full-time
- ☐ Enrolled as a student part-time
- ☐ Currently not enrolled

10. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Non-binary
- ☐ Decline to state

11. What is the highest degree, certification or achievement you currently expect to complete at this college/university?

- ☐ Associate degree
- ☐ Associate degree and seeking to transfer to a 4-year college/university
- ☐ Bachelor's degree
- ☐ Certificate
- ☐ Non-credit Program

- ☐ Graduate Degree (Masters, Doctoral)
- ☐ Not seeking a degree or certification, only seeking to transfer to a 4-year college/university
- ☐ Other

12. What is your current employment status? (Please check all that apply):

- ☐ Employed full-time
- ☐ Employed part-time
- ☐ A homemaker
- ☐ Retired
- ☐ Unable to work
- ☐ Unemployed but able to work
- ☐ Not employed because I am a full-time student

13. Are you currently receiving or in need of counseling or treatment for any emotional difficulties or substance use problems (perhaps including PTSD)? (Prior to COVID-19)

- ☐ Yes
- ☐ No
- ☐ Not Sure

14. Do you typically attend most of your classes online or on-the-ground? (Prior to COVID-19).

- ☐ Online/virtual
- ☐ On-the-ground (traditional classroom)
- ☐ Both online and on-the-ground

15. Since COVID-19 and if this college/university changed to online classes (due to social distancing) how well are you transitioning to an online learning platform?

- ☐ Extremely well
- ☐ Very well
- ☐ Moderately well
- ☐ Slightly well
- ☐ Not well at all
- ☐ Not applicable as this college/university does not offer online classes

16. At any time during your academic studies at this college/university, have you experienced any periods of homelessness (e.g., living in a car, on the streets, or public outdoor places, couch surfing at a friend's house, motel, etc.)

- ☐ Yes
- ☐ No

17. Are you aware of the Veteran Resource Center (or the Office of Student Veteran Services) at this campus?

- ☐ Yes
- ☐ No

(If no is selected, then skip to question 19)

18. If you have used any of the services/resources/programs or attended events through the college/university Veteran Resource Center (or the Office of Student Veteran Services) please rate your level of satisfaction with any of these.

- ☐ Extremely satisfied
- ☐ Somewhat satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Extremely dissatisfied

19. Do you participate in any college/university related services or programs for military/veteran students or attend military/veteran events outside of the Veteran Resource Center (or the Office of Student Veteran Services) on campus? (For example, military/veteran programs offered by a student-run organization within this college/university or other campus programs for military/veterans).

- ☐ Yes
- ☐ No

20. In general, how satisfied are you with the services/programs/resources or events provided to the student military/veteran community at this college/university?

- ☐ Extremely satisfied
- ☐ Somewhat satisfied
- ☐ Neither satisfied nor dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Extremely dissatisfied

21. Finally, what can this college/university do or offer to better meet any of your needs?

Thank you for taking the time to complete this survey.