FROM SERVICE TO STUDIES: RESILIENCE AND COLLEGE ADJUSTMENT IN STUDENT SERVICE MEMBERS/VETERANS

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May 2013

submitted in partial fulfillment of requirement for the degree

DOCTOR OF PHILOSOPHY IN URBAN EDUCATION

COUNSELING PSYCHOLOGY

At the

CLEVELAND STATE UNIVERSITY

December 2020

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August 5, 2020
Student's Date of Defense

DEDICATION

I dedicate this dissertation to the men and women of the United States armed forces, past, present, and future. May the knowledge gained be a step forward in providing you with the support you deserve. May the lessons learned be heeded by college administrators, faculty, healthcare providers, and students so that they may serve you and connect with you better. Finally, may the results serve to remind you of your own strengths and incredible capacity for resilience.

ACKNOWLEDGMENTS

I have several acknowledgements and statements of gratitude to those who have supported me throughout this journey. First, a resounding “thank you” to Dr. Julia Phillips, my dissertation chair, academic advisor, professor, and mentor, for believing in me when I struggled to believe in myself. Your patience, guidance, and encouragement were instrumental in helping me to complete this, and many milestones of my professional journey. Second, to Dr. Michael Horvath, my dissertation methodologist, who graciously gave his time, expertise, and support throughout this project. Your belief in me and your constant encouragement of me to grow and learn as a researcher have helped me to become a more well-rounded professional and scientist-practitioner. Third, to Dr. Kelly Liao, my third committee member and professor, I am grateful for your positivity, your faith in me, and your effort spent in helping to shape this project.

To my parents and family: I am indebted to you for your unconditional support (both emotional and financial) and encouragement throughout this long journey. You instilled a love of education and life-long learning in me from birth, without which I would not have had the ambition and passion to pursue this degree. Thank you!

To my friends: You are all truly champions and the most genuine people I know! Thank you for tolerating my occasionally needed absences, for listening to me share my journey with you, and for always being willing to celebrate with me along the way. Your belief in me helped me to persevere more than you will know.

To the countless others, past and present, who have made this all possible in immeasurable ways: thank you all!

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ABSTRACT

Nearly one million military service members are enrolled in institutions of higher education, 800,000 of whom are using the Post 9/11 GI Bill. These individuals bring a distinct set of interpersonal and intrapersonal characteristics with them to college campuses, yet there is a paucity of research exploring the factors related to their college adjustment. The literature that exists has focused on this population's challenges and pathology. College adjustment is understood as the way in which individuals acclimate to the new environment and culture of academia. Resilience is considered to be a function of personal and environmental characteristics that explain why some people flourish after trauma and others do not. The "healthy warrior effect" suggests that student service members/veterans (SSM/Vs) have lower vulnerability to stress in college because of their maturity and life experiences. Therefore, in this quantitative study, I used a strengths-based, positive psychology perspective to understand the college adjustment of SSM/Vs. I explored the effects of mental health diagnoses on adjustment as mediated by resilience. A final sample of 123 participants was derived from both Amazon's MTURK and 10 universities across the United States. Participants were 18+ years of age, identified as current or former military service members, and were current undergraduate or graduate students. Moderation analysis assessed whether the relationship between resilience and college adjustment differed depending on: 1) SSM/V combat exposure; and 2) military affiliation status (e.g. veteran versus National Guard/Reserve member). Mediation

analysis examined whether resilience mediated the relationship between PTSD, depression, and anxiety diagnoses and college adjustment. Support was found for all but one hypothesis. Implications for practice and research as well as the strengths and limitations of the study will be discussed.

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INTRODUCTION

Student Service Members/Veterans (SSM/V) History in Higher Education

To understand the present-day status of student service members/veterans, one must review the history of the U.S. military and higher education. This relationship has been long and complex, with each population of veterans from the various U.S. wars/conflicts presenting to post-secondary school with different needs, challenges and benefits. Until about 1920, when the Reserve Officers' Training Corps (ROTC) was instituted, education at universities for military service members remained largely incidental or an afterthought of U.S. policymaking (Abrams, 1989; Hammond, 2017). However, for nearly half of the 1900s, even with the presence of ROTC, little progress was made due to the U.S. involvement in World War II.

In 1944, the Servicemen's Readjustment Act, commonly known now as the G.I. Bill, was put in place to ensure post-war prosperity and job growth (Hammond, 2017). As a result, nearly one in eight returning soldiers enrolled in school, nearly doubling college enrollment rates at the time (Olson 1974; Hammond, 2017). In 1952, the bill was revised

into what is commonly known as the Korean War G.I. Bill. The revision refocused benefits on educational attainment and reduced the incentive of soldiers to use the bill for subsistence payments (Olson, 1974; Hammond, 2017). Another revision, known then as the Vietnam G.I. Bill, was enacted in 1966, and offered retroactive payments to peacetime serving veterans from 1955-1965 (MacLean, 2005; Hammond 2017). However, during this time, civilian education benefits had begun to match or surpass those offered by the military and thus the gap in educational attainment for Vietnam-era veterans widened (Teachman & Call, 1996; Hammond, 2017).

More iterations of the bill have emerged since then, such as the Veterans Educational Assistance Program (VEAP) of 1977 and the Montgomery G.I. Bill of 1984, both of which were lacking in the benefits they offered and the number of service members they benefited (Hammond, 2017). As modern-day conflicts arose, such as Operation Iraqi Freedom (OIF) in Iraq and Operation Enduring Freedom (OEF) in Afghanistan, the U.S. saw the enactment of the Post-9/11 G.I. Bill and now, the latest bill, known as the Forever G.I. Bill. Both of these bills expanded benefits for service members, such as providing basic allowance for housing (BAH) and, among the many changes included in the Forever G.I. Bill, it notably eliminated the time limit for veterans to use their educational benefits if they were discharged after January 1, 2013 (Military Benefits, n.d.).

The historical overview offers insight into the sociopolitical shifts across decades with regards to the military's approach and commitment to higher education for their service members and the civilian stance towards service members in higher education over the past century. Presently, institutions are seeing an overwhelming majority of

student service members/veterans attending school on the Post 9-11 G.I. Bill (Department of Veterans Affairs, 2017) as compared to the other benefits programs. This fact provides insight into the type of SSM/V and their concerns that institutions of higher education must educate themselves on in order to properly support these students in their educational goals. Yet despite the importance of understanding this population and how best to serve them on college campuses, the literature is lagging behind. Many researchers continue to call for more empirical studies of the SSM/Vs transition to higher education (Barry, 2015; Campbell & Riggs, 2015; DiRamio et al., 2008).

The number of military service members entering higher education has been increasing in recent years. The National Center for Veterans Analysis and Statistics reports nearly one million service members were using Veterans Administration (VA) education benefits in 2016, almost 800,000 of which were on the Post-9/11 G.I. Bill, compared to only about 565,000 total beneficiaries in 2009 (U.S. Department of Veterans Affairs). Institutions and universities are recognizing the growing inclusion of these individuals on their campuses and the increasing diversity of student service members themselves (Ahern, Foster, & Head, 2015). Long referred to as "student veterans," many have recognized the need to identify this population with a more inclusive title. Barry (2015) urges the use of the term "student service members/veterans (SSM/Vs)" so that reservists, national guardsmen and women, active duty members, and veterans are all represented in identifying the many paths to military affiliation. Despite such a growing number of service members entering higher education, there is a dearth of research on this population. Even as institutions begin to identify the diverse make-up of this population, little is yet known about their experiences and the factors affecting their

college adjustment. Emerging literature has identified this population as having unique academic needs and concerns as compared to their civilian student counterparts (DiRamio et al., 2008; Hammond, 2017; Kato et al., 2016). While the research on college adjustment for SSM/Vs is scant, the majority of literature that is published focuses heavily on the challenges, problems, and concerns that SSM/Vs bring with them to college (Ellison et al. , 2012) with very little attention and empirical study devoted to the strengths and assets of this population (Reyes et al., 2017). I am intending to bring balance to the discussion by exploring college adjustment though a positive psychology, strengths-based approach.

Within Group Differences Among SSM/Vs

While the discussion so far as generally spoken of SSM/Vs as a singular group, the within group differences of this population are vast and not to be overlooked. While a minority of undergraduate students are military veterans (3.7%), a smaller minority still are Reserve students (0.3%) and National Guard (NG) students (0.1%) (Molina & Morse, 2017). Gender, race, and age differences exist among the various subgroups as well. Specifically, 21% of student veterans are female, compared to 33% of NG students and 31% of Reserve students; 63% of student veterans are White (17% African American, 14% Hispanic) while 60% of NG students are White (11% African American, 14% Hispanic) and 53% of Reserve students are White (15% African American, 18% Hispanic); the average age to begin college for student veterans is 25, while the average age for NG students is only 20 and for Reserve students is 22 (Molina & Morse, 2017). These sub-groups of military-connected students vary on a number of other variables as well, including having combat exposure or not, their socioeconomic status, rates of

marriage, prevalence rates of mental health disorders, and more (Blackburn & Owens, 2016; Bonar, 2016; Elliott et al., 2011). These demographic differences are important and contribute to nuanced differences found in the literature regarding mental health concerns with these various sub-groups. Specifically, studies have found that military-connected students with combat exposure versus those without have higher rates of PTSD (Blackburn & Owens, 2016; Elliott et al., 2011) and that National Guard members often experience higher rates of social isolation and mental health issues as compared to veteran students, making them perhaps more at risk for college adjustment concerns. Based on these previous findings, it is expected that service status and whether or not an SSM/V had combat exposure will impact the relationship between resilience and college adjustment. Therefore, the current study intends to use service status (e.g. veteran or National Guard) and combat exposure (e.g. with exposure or without exposure) as moderator variables.

College Adjustment

Adjustment is considered by some to be a process of adapting to one's situation (Mattanah, 2016). More recently, however, there has been a shift from viewing college adjustment as a predictor or process and instead as an achievable ability or outcome (Gerdes & Mallinckrodt, 1994; O'Donnell et al., 2018). Additionally, many theorists believe the construct is comprised of several factors/domains, including student/academic, personal or emotional, and social domains (Gerdes & Mallinckrodt, 1994; O'Donnell et al., 2018; Young, 2017). A simple dictionary search of the word "adjust" yields the following definitions: "1. to bring the parts of to a true or more effective relative position; 2. to adapt or conform oneself (as to new conditions); 3. to

achieve mental and behavioral balance between one's own needs and the demands of others" (Adjust, n.d.). With the third definition in mind, the adjustment to college can be considered an achievable state or outcome whereby a student has adapted to their new situation through utilization of both intra- and inter-personal factors. People are the product of their life experiences, values, and beliefs and each student brings their own background to college. Institutions of higher education likewise have a culture and history of their own, which can, at times, clash with an individual student's beliefs and worldview. Those students who achieve balance between themselves and their new environment, do so for their own benefit and utility and often with accompanying academic success.

Research on college adjustment was born from studies examining college dropout versus persistence (or retention) rates of students. Theorists who focus on the college student experience, specifically related to adjustment and dropout, have argued that social and academic systems affect a student's persistence in college (Baker & Siryk, 1984; Chickering, 1996; Gerdes & Mallinckrodt, 1994; Tinto, 1975, 1993). It is a student's adjustment to those systems, and an accounting of external and personal factors, which determine whether a student will adapt successfully to the higher education environment or not (Gerdes & Mallinckrodt, 1994). Included in personal factors is emotional adjustment, which has been shown to be a third dimension of adjustment, behind social and academic dimensions, and important in predicting persistence in college (Gerdes & Mallinckrodt, 1994).

Tinto's process theory of dropout (1975) makes a distinction between voluntary withdrawal from school and involuntary, academic dismissal. This distinction is

important as there are different aspects of adjustment that lead to them. Specifically, it's been found that challenges adapting to academic demands (such as getting good grades) is linked with academic dismissal whereas concerns with social and emotional adjustment are more often linked to voluntary withdrawal (Tinto, 1975). Moreover, poor emotional adjustment in college has been linked to poorer health outcomes and specific difficulties adjusting academically, which can lead to higher dropout rates (Feldt et al., 2011).

Another important factor in college persistence is the college environment itself. Specifically, institutional characteristics, such as resources, staff, and college type (private or public), play an important role in determining if a student will drop out or not (Astin, 1964; Tinto, 1975). As such, it makes intuitive sense that a number of offices exist on college campuses to help provide resources to students as they adjust, such as a student affairs offices, advising, and tutoring, especially for particular subsets of students such as student veterans, international students, or minority students. Interestingly, knowing about one's self and knowing about the institution can help students more accurately predict their own adjustment, suggesting that more self-aware students and students with knowledge of the specific college environment to which they belong could have more positive adjustment (Baker et al., 1985). This is yet another example of the interplay between personal and institutional factors that contribute to social, emotional, and academic college adjustment.

Though the current study is not examining retention or dropout rates specifically, this early literature is helpful nonetheless to conceptualize factors important to successful college adjustment. In general college populations, it is well established that successful adaptation to college includes socialization, academic achievement, and emotional well-

being. It makes sense to suggest that these same factors influence all subsets of students but perhaps with more nuance and considerations. More research regarding personal factors that contribute to emotional well-being in students is needed if we are to better understand how to predict positive college adjustment.

Civilian and Nontraditional Students

The current perspective on college adjustment in the literature regards adjustment as a multidimensional construct that captures a student's ability and functioning in the college experience (Gerdes & Mallinckrodt, 1994; O'Donnell et al., 2018). This represents a shift in thinking about college adjustment as purely a predictor variable for other outcomes and, as such, has opened the doors to new areas of research in which college adjustment itself is predicted from other variables, such as stress (Chemers et al., 2001), mental health concerns (Smedley et al., 1993), and a non-traditional student status (Spitzer, 2000). In this way, college adjustment is an achievable outcome itself.

The research on SSM/Vs in college tends to treat SSM/Vs as nontraditional students in many regards. Enrollment status and age are considered to be two primary ways to define nontraditional students such that these students tend to enroll in college years after high school and tend to be older, with some suggesting 25 years+ (Bean & Metzner, 1985; Wyatt, 2011). Moreover, nontraditional students are also considered to come equipped to college with knowledge based in work and life experience (Toynton, 2005). Findings from the National Postsecondary Student Aid Study, 2011-2012, revealed that the average SSM/V starts college 5 years after high school, is age 25, 44% are married, 52% have dependents, and 42% work full-time while in school (Molina,

2014). The profile of the average SSM/V neatly fits the current understanding of nontraditional student status.

Higher Education Adjustment and SSM/Vs

However similar to the nontraditional student classification, student service members/veterans are generally considered a distinct subgroup of nontraditional students because of their military background (Southwell et al., 2018). They carry a unique and rare set of experiences and values from their military experience with them to college such as a deep-rooted sense of honor, teamwork, self-sacrifice, structure, and commitment to the mission (Suzuki & Kawakami, 2016). Emerging literature has pointed out that these values can sometimes be seemingly out of line with the values inherent on college campuses (Ackerman et al., 2009; Ahern, Worthen, Masters, Lippman, Ozer, & Moos, 2015). In other words, many SSM/Vs cite concerns fitting in with younger peers, having trouble navigating bureaucratic red tape, feeling a sense of isolation, and struggling to find a new purpose outside of the military (Kato et al., 2016). Furthermore, SSM/Vs are more likely to hold conservative ideological viewpoints (Elliott, 2015) whereas college campuses are widely known to hold and perpetuate liberal views and ideologies. There is no denying the many physical and psychological concerns that SSM/Vs carry with them from service as well. SSM/Vs are more likely than civilian students to have experienced trauma (Barry, Whiteman, & Wadsworth, 2012) and have traumatic brain injuries (TBI; Ragsdale et al., 2013), and are at risk for suicide and developing PTSD, depression, anxiety, sleep concerns, and substance use disorders (Barry, Whiteman, Wadsworth, & Hitt, 2012; Bryan & Bryan, 2015). However, though less cited, SSM/Vs have the potential to be superior students in many ways. They often

already have rich life experiences, they tend to be older and perhaps more mature, and often view college as professional development rather than a time for party and self-exploration (Barry, Whiteman, and Wadsworth, 2012). The notion of the "healthy warrior effect" has been discussed minimally in the literature, but it suggests that service members are often considered in better physical and mental health than civilians and taught to overcome extreme challenges and conditions which leaves them resilient and adaptable (Waller & McGuire, 2011). It is this premise that has helped guide the current study. More empirical exploration is needed to contribute to this side of the discussion in which the strengths of this population are highlighted, specifically within the college environment.

Positive Psychology

Positive psychology as a science was developed out of a need to provide balance to the discussion of human nature and wellbeing. Martin Seligman, considered the founder of positive psychology, described it as "the scientific study of optimal human functioning that aims to discover and promote the factors that allow individuals and communities to thrive" (Seligman & Csikszentmihalyi, 2000). Psychology, traditionally a field focused on pathology and un-wellness, had thus far failed to account for how the average person thrives in life, as an individual and as part of society (Seligman & Csikszentmihalyi, 2000). The science of psychology has historically focused on how individuals survive and endure through difficult and traumatic experiences. The drive to illuminate the other side of this discussion led researchers to study the individual and group level characteristics of thriving, happy, well-adjusted, and resilient people. Seligman defined his emerging field of study in this way: rather than only focusing on

fixing people's weaknesses, the field should focus on nurturing people's strengths (Seligman & Csikszentmihalyi, 2000).

In 2011, Seligman published a book outlining his five pillars of positive psychology and wellbeing, what he calls the PERMA Model: Positive emotion, Engagement, Relationships, Meaning, and Accomplishment (Butler & Kern, 2016). This model is an attempt to define psychological wellbeing and supposes that wellbeing is not merely the absence of negative emotions or pathology, but rather, is an "optimal state of psychosocial functioning" across the five pillars listed above (Butler & Kern, 2016). Emotions can be positive or negative, but it is suggested that positive emotions are associated with greater wellbeing. Engagement refers to one's psychological attention to one's life and its various domains. Relationships refer to the level and perception of social support. Meaning is considered to be a sense of purpose and value that one feels about one's life. Lastly, accomplishment is simply working towards and achieving one's goals (Butler & Kern, 2016).

Resilience is a component of positive psychology that is often thought to contribute to wellbeing. Generally speaking, it is seen as a construct that includes both the presence of adversity and the ability to positively adapt and overcome said adversity (Luthar & Cichetti, 2000). It is thought to develop from a human's effective ability to maintain normal, healthy functioning, even in the face of trauma and extreme adversity, whereby one might be less resilient if their ability to adapt is damaged or in poor working order (Masten, 2001). In other words, the concept of resilience turns deficit-focused models on their head by highlighting the ability of people to overcome and thrive in

situations that have historically been thought to hold people back, such as socioeconomic disadvantage, illness, and trauma (Masten, 2001).

Resiliency

Resilience theory, a principle construct within the broader positive psychology framework, is a difficult construct to define. In fact, there has been, and remains, ongoing debate over the definition, conceptualization, theoretical approaches, and methods of assessing resilience (Fletcher & Sarkar, 2013). The majority of research is in agreement, however, regarding two important conditions of resilience: a preceding adversity or hassle and positive adaptation to or overcoming of said adversity (Fletcher & Sarkar, 2013). Resilience theory fundamentally seeks to explain why some people flourish and thrive after adversity/trauma and others do not (Masten, 2001, 2014). Some theories have conceptualized resilience as a personality trait (Miller & Harrington, 2011; Hu et al., 2015) whereas other theorists posit that resilience is a dynamic interaction or process between a set of personal characteristics and one's environment that changes over time (Fletcher & Sarkar, 2013; Masten, 2001, 2014). Additionally, theorists have pointed out that a process approach to resilience theory accounts for the person-environment interaction in a way that a trait theory cannot (Luthar, Cicchetti, & Becker, 2000) and the process approach explains why resilience can change over time and is influenced by sociocultural factors (Fletcher & Sarkar, 2013). As some have pointed out, the more personal characteristics that an individual embodies which contribute to resilience, the more likely the individual will be able to shape the social and contextual environment to help suit their needs (Ercan, 2017).

Resilience theorists (e.g., Connor & Davidson, 2003) have cited researchers in the area of hardiness (e.g., Maddi et al., 2012) to help clarify the definition of resilience. They make a point to explain the distinction between hardiness and resilience. Hardiness is a construct that remains independent of situational context whereas resilience is defined in the context of adversity. Both have, in fact, been found to predict academic success in military populations (Maddi et al., 2012). Given the link between resiliency and underlying personality factors, some researchers have sought to help define and predict resiliency though the lens of the Big 5 personality traits. Ercan (2017) found that higher ratings on all factors (openness, conscientiousness, extroversion, and agreeableness) except neuroticism were significantly associated with greater levels of resiliency. In fact, higher levels of neuroticism were negatively correlated with factors of resiliency, such that more neurotic individuals tended to be less resilient.

Prevailing theorists in the realm of resilience, who originally developed a 25-item multifactor measure of resilience, revisited their original scale to re-analyze its psychometric properties (Campbell-Sills & Stein, 2007). Through a series of EFAs and CFAs, they found that a 10-item, unidimensional measure of resilience was most appropriate for measuring resilience. The final 10 items capture what the researchers believe to be as the core features of resilience, after eliminating items that cross-loaded onto multiple factors or were highly correlated with other items. These researchers define resilience as an individual's ability to thrive despite adversity and they developed a measure to capture this construct. Their definition is used to conceptualize and measure resilience in the present study.

Researchers in the field of resiliency theory highlight the importance of prosocial behavior, positive attitudes and outlooks, and feelings of self-efficacy and control as integral to the makeup of resiliency as a construct (Vance, 2018). However, it's important to make the distinction between resilience and coping (Fletcher & Sarkar, 2013), adjustment (Luthar, Cicchetti, & Becker, 2000), and self-efficacy (Bandura & Schunk, 1981). Coping can either be adaptive or not whereas resilience is inherently a positive, adaptive protective factor against adversity and stress (Major et al., 1998). Additionally, resilience has been found to be related to the appraisal of a situation and serves as a protective factor whereas coping can only be a response to a situation after an appraisal is made (Fletcher & Sarkar, 2013; Major et al., 1998). Furthermore, resilience is distinct from adjustment in that adjustment does not require adversity or trauma to precede it. In other words, adjustment is conceptualized as adaptation to any new situation or environment, good or bad and with or without some negative experience, whereas resilience serves as a protective mechanism against a problematic experience (Luthar, Cicchetti, & Becker, 2000). Finally, self-efficacy is a belief in one's own ability to execute action(s) toward a desired outcome or for goal attainment, with or without the presence of trauma or significant adversity (Bandura & Schunk, 1981). Whereas self-efficacy is a belief in one's ability to complete a task or achieve a goal, resilience is one's ability to withstand and overcome adversity/trauma. As such, self-efficacy is a distinct though related concept as one's belief in their ability to overcome a challenge has been found to relate one's actual ability in overcoming said challenge, i.e., resilience (Hernandez et al., 2019; Masten, 2014).

Resilience and Mental Health

The concept of resilience in its essence is the ability to bounce back after adversity or trauma and withstand stress. Therefore, it would be logical to assume that individuals with higher resilience may have fewer mental health diagnoses, such as depression, anxiety, or PTSD. In fact, one of the traditional approaches to resilience conceptualized the construct as one's ability to avoid developing psychopathology or significant dysfunction in the wake of trauma or adversity (Masten, 2001). A meta-analysis of 60 empirical studies examining resilience and mental health, in which resilience was defined as a trait, found that trait resilience was lower in individuals with higher rates of depression, anxiety, and negative affect (Hu et al., 2015). The same meta-analysis also found that age moderated the relationship between resilience and negative indicators of mental health, suggesting that individuals may become more resilient as they age. Given that student veterans tend to more closely resemble non-traditional aged students, this particular population may be equipped with more resilience than their typical aged college student counterparts. Another study, one in which resilience was defined more as an outcome and a mix of both extrinsic and intrinsic factors, rather than as a trait, also found that higher resilience contributed significantly to positive mental health and lower alcohol/substance use (Eisen et al., 2014). This suggests that the notion of resilience, whether as a trait or an outcome, serves as a buffer against the harmful effects of trauma and improves mental health outcomes.

Resiliency and SSM/Vs

Given the lack of focus on SSM/V's strengths in the current literature on college adjustment, the current study intends to utilize a positive psychology framework to explore the concept of SSM/V's college adjustment. The military emphasizes optimal

mental and physical performance. They place value on education and learning, across the lifespan. Furthermore, they enforce an atmosphere of "no one left behind" which promotes tight social bonds and engagement among service members. As such, these individuals carry with them a host of interpersonal and intrapersonal strengths and resources. In fact, some scholars have hypothesized that the person-environment fit contributes more to difficulties transitioning to college for SSM/Vs than the concerns and challenges they bring with them as individuals, such as mental and physical health disorders (Smith et al., 2017).

Considering the emphasis on wellbeing in the military and given resiliency theory's emphasis on wellbeing and adaptive functioning, even in the face of stress and adversity, it seems appropriate to view SSM/Vs and their adjustment to college through this lens. Many service members have faced or witnessed unimaginable circumstances and life-threatening situations yet survived and have returned to civilian life. It feels especially empowering to apply a resiliency theory model to their college adjustment when we consider the weight of their military experiences on the rest of their lives. Even the United States Army has implemented a Warrior Resilience Training (WRT) program in light of the Operation Iraqi Freedom (OIF) conflict with the mission of promoting posttraumatic growth and resiliency among soldier's (Jarrett, 2008). The WRT is embedded in the Army's Warrior Ethos and uses Rational Emotive Behavioral Therapy, leadership principles, and positive psychology to develop soldiers into resilient warriors, capable of overcoming the challenges and trauma faced in theatre—a term used to describe being in an active war zone (Jarrett, 2008).

Building from this model and through consultation with Martin Seligman, General George W. Casey of the United States Army decided to implement a Comprehensive Soldier Fitness (CSF) program (Casey, 2011). This program seeks to identify resiliency strengths, provide individualized online self-help modules for the soldiers, train "master resilience trainers," and mandate resilience training at every Army leader development schools (Casey, 2011) whereby ensuring that Army soldiers are just as psychologically fit as they are physically fit (Cornum et al., 2011). The goal of the CSF program is largely preventative, operating under the documented premise that resiliency can buffer against development of PTSD, depression, anxiety, and other mental health concerns (Seligman & Fowler, 2011), with the hope that the Army can develop resilient soldiers and ultimately resilient civilians once their military service comes to an end (Casey, 2011). These veterans are returning home, and many have decided to return to school and pursue a degree and a new career. We cannot, therefore, underestimate the importance of resiliency found in these individuals and their ability to thrive against stressful, and often traumatic, experiences.

The Current Study

Given the growing need to study college adjustment in SSM/Vs and the lack of a strengths-based perspective in the literature, I will adopt a positive psychology approach to studying SSM/Vs. While it is known that many veterans are returning from service with mental and physical wounds, such as TBI, posttraumatic stress disorder (PTSD), anxiety, depression, and sleep concerns, I'm interested in exploring the strengths of these returning veterans. Resiliency theory is a concept within positive psychology that is understood as a person's ability to overcome adversity and challenge. Even without the

presence of physical and psychological wounds, the very act of transitioning from military service to a civilian college environment is challenging and has often been viewed through various stress models (Elliott, 2015).

I propose that SSM/Vs possess resources and both interpersonal and intrapersonal skills that can benefit them on a college campus, if only these skills are recognized and encouraged by institutions, practitioners, college administrators, veteran support staff, and by the veterans and service members themselves. The present study seeks to identify the impact of resiliency on college adjustment for SSM/Vs, especially when considering differences in combat exposure and service status (such as former active duty (aka veteran) or national guard/reservist). Moreover, this study aims to demonstrate the mediating effect of resilience on the relationship between mental health concerns (specifically, PTSD, anxiety, and depression) and college adjustment. These factors have been shown to be important distinguishing characteristics of this general population related to various outcomes (Blosnich et al., 2015) and should therefore be taken into account. Moreover, there is no study of which this author is aware that accounts for all of these variables within the same sample within the context of the current larger research question.

Research Hypotheses

1-3. Mental health concerns, as captured by the PCL-5 (Hypothesis 1), PHQ-9 (Hypothesis 2), and GAD-7 (Hypothesis 3), will be negatively correlated with resilience, such that lower mental health concerns will be associated with higher levels of resilience.

4. Resilience will be positively associated with college adjustment, such that higher resilience will be associated with better adjustment.

5. Resilience will mediate the relationship between mental health concerns and college adjustment such that greater resilience will improve college adjustment, even in students with mental health concerns.

6. Resiliency's prediction of college adjustment will be moderated for veteran students versus National Guard members/Reservists (NG/R) students. Specifically, it is expected that a weaker relationship will be found for NG/R as compared to veterans who previously served active duty.

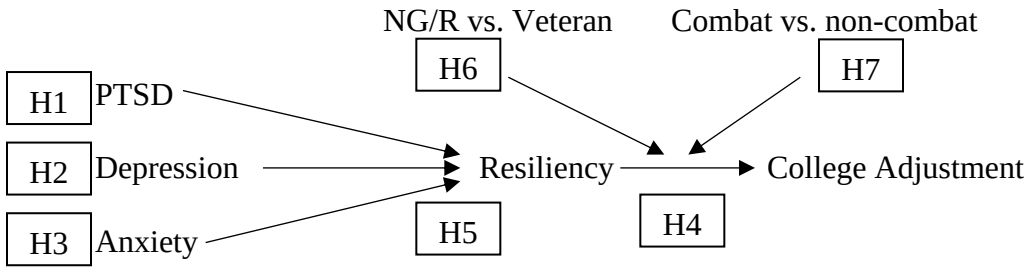
7. Resiliency's prediction of college adjustment will be moderated by combat exposure, such that the relationship between resiliency and adjustment is expected to be weaker for combat exposed veterans vs. non-combat exposed.

In this chapter, I provided an overview of the current constructs being studied and provided a rational for studying them then presented my hypotheses (see Figure 1). Though college adjustment has been studied for many years, the college adjustment of SSM/Vs in particular is lacking. There is considerable evidence suggesting that SSM/Vs constitute a subpopulation of nontraditional students who bring with them a specific set of military-related characteristics that impact college adjustment in unique ways (Molina, 2014). Additionally, though resiliency has been studied and fostered in military populations (e.g. Casey, 2011) and in numerous other contexts of human suffering and trauma (Masten, 2014), there is little published research exploring the positive impact that resiliency can have on college adjustment (except for one known dissertation on the topic, see Young, 2012) for this population. In the next chapter, I will review the

constructs in more detail while providing an overview of the positive psychology framework that contextualizes the current study and its aims.

Figure 1

Hypotheses Model



CHAPTER II

LITERATURE REVIEW

In this chapter, I will review the literature on college adjustment, both for civilian students and student service members/veterans. Furthermore, I will review the positive psychology framework and resiliency theory, providing important links between the theories and the current study. The purpose of the literature review is to explore what has previously been done to better understand college adjustment, resiliency theory, and SSM/Vs, while highlighting important gaps in the scholarship thus far. Moreover, the purpose of the literature review is to provide support for the aims of this study, which are to demonstrate the importance of resiliency in predicting positive college adjustment and to add a crucial discussion to the literature on SSM/Vs regarding the strengths of this population on college campuses.

College Adjustment

It's important to consider college adjustment in general when attempting to explore adjustment in a particular subset of students, such as SSM/Vs. Compared to the literature on college adjustment for SSM/Vs, the literature on general college student adjustment is much broader, spanning back much earlier in history. A meta-analytic

review of 156 studies published from 1986 to 2009 explored the impact of parental attachment on college development and adjustment later in life (Mattanah et al., 2011). From this, the researchers proposed a comprehensive model of college adjustment to include five domains: 1) academic achievement and competence, 2) interpersonal competence and relational satisfaction, 3) stressful affects and high-risk behaviors, 4) self-worth and self-efficacy, and 5) developmental advances in autonomy, ego identity, separation-individuation, and career identity (Mattanah, 2016; Mattanah et al., 2011). These five domains are often cited in the literature, in one form or another, related to college adjustment (Gerdes & Mallinckrodt, 1994).

In 1994, two researchers explored the three major areas of college adjustment—academic adjustment (such as ability, motivation, commitment), social adjustment (such as engaging with peers and social groups), and personal or emotional adjustment (including concerns with mental and physical health)—in a longitudinal study of 208 college students (Gerdes & Mallinckrodt, 1994). They sought to explore if students' expected adjustment rates would predict actual adjustment. Their sample was mostly female (n = 152) and all had graduated high school in 1985. No other descriptive statistics were given about their population sample. The authors used pre-published versions of the Student Adaptation to College Questionnaire (SACQ) and the Anticipated Student Adaptation to College Questionnaire (ASACQ) to assess actual and anticipated college adjustment respectively. The ASACQ was administered before the start of the fall semester and the SACQ was given seven weeks into the students' first fall semester. After six years, in 1992, the authors reviewed academic records for all students to determine academic standing, graduation rates, drop-out rates, GPA, and other variables.

At six years, the authors found that 70% of their sample (n = 145) had graduated and 2% were still enrolled (n = 4). These students were considered "persisters" while the 28% (n = 59) who had dropped out were labeled "leavers." The students were categorized into one of four group based on their persister or leaver status and their good or poor academic standing (good-standing persisters = 113, poor-standing persisters = 36, good-standing leavers = 29, and poor-standing leavers = 30). Results of their analysis indicated that students tended to overestimate their adjustment to college academically and socially while underestimating their ability to adjust personally/emotionally. Unfortunately, the authors did not find support for the notion that expected versus actual adjustment discrepancy scores would be predictors of attrition. They did identify a number of factors that predict persistence based on academic standing, however. Specifically, for those in good standing, it was important to have informal contact with professors and a sense of self-confidence and satisfaction with course offerings, but for those with poor standing, it was important to have satisfaction with extracurricular activities, be free from anxiety, and not have thoughts of dropping out. This study highlights the nuance among three leading components of college adjustment, academic, social, and emotional, and also hints at the importance of intrapersonal factors in determining actual levels of adjustment. For SSM/Vs, these same three components should be considered with the possibility that they may differ in development from civilians.

SSM/V Adjustment to Higher Education

In just the past decade, researchers have begun to find evidence for the factors that affect college adjustment for SSM/Vs. Social support and having more positive relationships have been associated with fewer posttraumatic stress symptoms and

avoidance motivation in SSM/Vs (Ness et al., 2015) while having mental health concerns, such as generalized anxiety, depression, posttraumatic stress disorder and traumatic brain injury, are more likely to negatively impact their college adjustment (Schonfeld et al., 2015). Other factors such as relearning study skills (Ackerman et al., 2009), having combat exposure (Smith et al., 2017), SSM/V's attitudes towards their military service (Elliot, 2015), battling stereotypes (Kato et al., 2016) and navigating academic bureaucracy (Ackerman et al., 2009) have all been found to impact college adjustment for SSM/Vs. However, to better understand the SSM/Vs transition to college, one must first explore what it means to transition to civilian life in general.

Veteran Adjustment to Civilian Life

One qualitative study by Ahern, Worthen, Masters, Lippman, Ozer, & Moos (2015) conducted semi-structured interviews with 24 U.S. veterans of the Afghanistan and Iraq wars to better understand their experiences in transitioning to civilian life. Participants varied in age (range from 22 to 55), race (40% White), gender (70% male), and military branch. Roughly 30% of participants had been discharged from the military within the past year. The specific qualitative approach was not described and the article lacked detailed descriptions of their rigor and analysis, however, the authors concluded that three main themes emerged across the 24 interviews—military as family, normal is alien, and searching for a new normal—with each theme having its own subsidiary themes. The authors utilized homecoming theory (which suggests that while the service member is away, both they and their home environment/families change such that there is a mutual lack of familiarity upon the service members return) to understand their results. These results suggest that a focus on reconnection, finding purpose and structure, and

accessing support are vital to a veteran's success adjusting to civilian life, including in higher education institutions.

Others have likened the transition to an acculturation model. The military is a culture in and of itself such that service members experience certain norms and values while in the military and then must re-integrate into a new civilian culture once they separate from the military. It is this integration or assimilation that is the point of friction during the transition from military to civilian life. Another qualitative study, by Suzuki & Kawakami (2016), sought to explore these reintegration themes from an acculturation model perspective by conducting semi-structured interviews on 11 former service members who were healthily adjusted with no indication of mental or physical health concerns. The participants were mostly males (9 males, 2 females), with a mean age of 42 (age range 22-67 years), and an average service length of eight years (range of service 2-23 years). The authors found five major themes related to reintegration: freedom from choice, the contrast between "sense of alertness" among wartime service members and "sense of boredom" among peacetime service members, discipline, comradery, and service to others. They concluded that these five themes play out in the transition to civilian life and create dissonance for the service members. While these findings highlight common concerns for service members, it's important to note the study's many limitations. The sample was small with very few demographics noted. As is common with many qualitative studies, the small sample and limited demographics presents concerns with transferability of these findings. There was very little mention of the author's attention to rigor and empirically sound methodology. Of concern, some interviews were conducted in person while others were done via a written survey and the

authors failed to mention the details of their coding and analysis techniques. However, the conclusions point to relevant areas of continued study and highlight the applicability of an acculturation model to service members' transition, not only to civilian life, but to civilian higher education which is arguably another culture of itself. Both of the studies described point to the need to better understand the assimilation and transition concerns of SSM/Vs with focus on needs for connection, service, support, and purpose.

The Wounds of War and their Impact on College Adjustment

Though sparse, the current literature has identified similar findings related to SSM/Vs transition to higher education specifically while identifying the unique characteristics and challenges that SSM/Vs bring with them to college. Utilizing a stress theory model, Elliott (2015) sought to predict the problems that SSM/Vs may face on a college campus. Her study used structural equation modeling (SEM), grounded in stress process theory, to explore predictors of veterans' negative campus experiences. Stress process theory posits that one's position in society's structure (such as having a low socioeconomic status) predicts the type and amount of stress one experiences, which then impacts one's mental health (Pearlin et al.1981). The author hypothesized that military background (such as extent of combat exposure), social support (such as current and past support from veteran and non-veteran friends), and social stressors (such as financial strain) will predict veterans' experiences on campus. Furthermore, Elliott hypothesized that mental health (specifically depression and PTSD) would mediate the relationship of those three factors on veterans' campus experiences. The sample included 626 student veterans who were diverse in gender (about a fourth being female), age (mean age=34), marital status (57.8% married), race (73% White), and education background (47.9%

attended 4-year college). The author found that social support was associated with fewer symptoms of depression and PTSD and thus fewer negative experiences on campus. Furthermore, having more positive attitudes towards one's military service was also associated with fewer mental health concerns and thus fewer negative campus experiences. The author also found that women and Black male veterans, two social minority groups, as compared to their white male counterparts, and those serving in the National Guard and during peace-keeping missions tended to be more depressed. Of note regarding Elliot's study, is the impact that one's attitude toward service had on future experiences and mental health concerns. This particular finding has implications for my own research given that resiliency, which incorporates attitudes and approaches to one's life experiences, may similarly have positive impact on SSM/Vs adjustment to higher education. Moreover, the differences found between veterans and National Guard members as well as the differences found between combat exposed versus non-combat exposed veterans likewise provide support for my sixth and seventh hypotheses and suggest that nuanced outcomes may found among these subpopulations.

As research into the experiences of SSM/Vs college adjustment is still relatively new, some researchers have found a qualitative approach to be useful. In an effort to identify adjustment related themes, Kato and colleagues (2016) utilized a grounded theory approach to their research. They interviewed 19 student veterans (15 male, four female) of various ages (age range = 23 to 46), races/ethnicities (White, Hispanic, Black, Asian, Pacific Islander, and mixed), marital status (married, single, engaged, divorced), and branch of service (Army = 13, Marines = 3, Navy = 2, Air Force = 1). They found four themes consistent with previous research findings: bridging the gap between the

military and civilian worlds, rebuilding a support system outside the military, readapting to the culture of civilian life, and finding meaning in a new life perspective and purpose. They also found three newer themes, not overtly found in the literature to date: battling the stereotypes, taming the fight-or-flight response, and attitudes about mental illness in the military carry over. The first four themes highlight what has been established in the literature related to adjustment for SSM/Vs in higher education, such that social support, finding meaning, and cultural adaptation are essential components of the adjustment process. The three new themes highlight the impact of military-related mental and physical injuries that can impact college adjustment. The authors suggest practical and empirically based recommendations for institutions to adopt in order to aid in the transition and academic success of their SSM/Vs such as establishing mentors for incoming student veterans, having a veterans' service officer (VSO) on campus available to help SSM/Vs navigate their VA benefits, and providing access to mental health services (Kato, Jinkerson, Holland, & Soper, 2016). The findings also point to important considerations for my own work. Knowing the crucial components of adjustment for veterans can help to guide the exploration of factors that can buffer against adjustment concerns. Specifically, to the best of my knowledge, no research to date has yet to look at resiliency and how it can aid in the transition for SSM/Vs, despite its potential importance to navigating relevant adjustment concerns such as finding new meaning and purpose, securing new social supports, and overcoming health-related struggles.

Griffin and Gilbert (2015) used qualitative research to further the discussion in the literature of how institutions can aid in the SSM/Vs transition to higher education. They employed Schlossberg's Transition Framework to guide their study which posits there are

four S's—resources—that influence one's ability to cope during a transition: situation, self, support, and strategy (Schlossberg, Waters, & Goodman, 1995 as cited in Griffin & Gilbert, 2015). Specifically, through semi-structured interviews and focus groups with 72 administrators, student veterans, faculty, and student affairs personnel, the authors attempted to understand how institutions provide veterans with resources (regarding the 4 S's) and what challenges institutions face when trying to provide a successful transition into school for veterans. The authors found three themes that emerged: personnel and services (the importance of offices and professionals on campus who understand the needs of student veterans), institutional structures (need for specific policies and procedures), and social and cultural support (student veteran representation and peer-to-peer relationships). These findings corroborate other research which highlight the importance of institutional support, social support, and aid in navigating cultural differences in helping to aid SSM/Vs transition to higher education. However, some limitations of these author's work should be noted. There was no specific qualitative theory identified or guiding their work. Additionally, there were numerous types of participants which were not specifically described making it difficult to contextualize their findings and determine transferability of their conclusions. With regards to my own work, it's important to take their findings into account while exploring how personal traits of the SSM/Vs can contribute to their transition. It is important to identify the types of individuals who may struggle to adjust (e.g. such as those who are less resilient) even with institutional support so that they do not remain unnoticed or forgotten by the academic bureaucracy.

Highly relevant to the discussion of college adjustment for student service members/veterans is the impact of the psychological and physical wounds of war and military service. The bulk of service members attending institutions of higher education are utilizing the Post 9-11 G.I. Bill indicating a majority of SSM/Vs who have served in the military during wartime, whether they saw combat firsthand or not. The bulk of literature exploring college adjustment on SSM/Vs to date has focused on the emotional toll that military service has had on them and how their studies are impacted as a result. Below is a review of the literature exploring the prevalence and impact of health, physical and mental, on college adjustment for SSM/Vs/.

In a national sample of 628 SSM/Vs, Rudd, Goulding, and Bryan (2011) sought to explore the prevalence of mental health concerns and level of suicide risk for this population. Their sample included a majority of males (79%, 21% female) with diverse ages (M = 26), and diverse races/ethnicities (77% White, 7% African American, 12% Hispanic, 3% Asian, and 1% Native American). All four core branches and the Coast Guard and the National Guard were represented in the sample with over half of their participants having had direct combat exposure. The authors measured anxiety using the Generalized Anxiety Disorder 7-item scale (GAD-7), depression using the Patient Health Questionnaire 9-items (PHQ-9), PTSD using the Posttraumatic Stress Disorder Checklist-Military version (PCL-M), suicide risk using the Suicide Behavior Questionnaire-Revise (SBQ-R), and combat exposure using the Combat Exposure Scale (CES). They found that nearly all mean scores on each scale reached clinical significance for the presence of the mental health concern it measured, expect in the case of the CES and the SBQ-R. In other words, the majority of their sample reported moderate anxiety, moderately severe

depression, and a clinically significant likelihood of having PTSD. They found that of those who indicated combat exposure, it was light to moderate exposure. Upon more detailed review of the SBQ-R results, the authors found significant suicide risk in the sample, with 46% having thought about suicide some time in their past and 3.8% reporting that a suicide attempt was likely or very likely to occur (compared to 1.3% in the general student population). These results indicate that the SSM/V population experiences significant mental health distress while in school, distress that cannot be ignored by educators and institutions. Of course, these results influence my own work by pointing to significant mental health concerns to assess for in exploring their direct impact on academic functioning for SSM/Vs, particularly among subgroups such as combat versus non-combat exposed veterans.

Social support has been established as an important component of adjustment for SSM/Vs, not just in transitioning to civilian life but to college. Some SSM/Vs report feeling a poor fit on college campuses which can leave them feeling alienated (Elliott, Gonzalez, & Larsen, 2011) which only exacerbates mental and physical health concerns. Elliott et al. (2011) wanted to identify the causes of alienation on campus for SSM/Vs. They surveyed 104 SSM/Vs from a single university. Their final sample was comprised of a majority of males (76%), with 42.3% currently married or partnered, and an average age of 30.92 years (range 19-55). They measured PTSD (using the PCL-M), alcohol use (using four questions from the AUDIT), social support (using items from an index developed by Ross & Mirowsky), and campus alienation (using four items developed by the researchers for use in this study). The authors found that those with combat exposure were more likely to experience alienation on campus and symptoms of PTSD. Social

support may protect against PTSD in some cases. For those with functional limitations (i.e. trouble climbing stairs), they were more likely to experience PTSD symptoms, unless they reported having social support, in which case they experienced fewer PTSD symptoms. For those with PTSD, they were more likely to experience campus alienations and concerns with alcohol use. These results appear intuitive however, concerns with the author's methodology should be raised. Very little detail was given regarding their statistical procedures and their measures were lacking empirical basis. To measure social alienation, they developed their own questions for use in the study and adopted items from other measure to assess alcohol use and social support without indicating the empirical support and validity to do so. While their results highlight important concerns for this population, more empirically sound research is needed to replicate their results.

Along the same line of study, Widome and colleagues (2011) sought to explore the direct impact of PTSD on health risk behaviors (such as being involved in physical altercations) and problematic alcohol use (Widome et al., 2011). They utilized secondary national data collected by the University of Minnesota's Boynton Health Service's College Student Health Survey (CSHS) collected in 2008. Their final sample included 408 SSM/Vs from the OIF/OEF conflicts. The majority were male (78%), older than 25 years, and White (89%), which 15.5% of the sample reporting a history of a PTSD diagnosis (7.6% of which were diagnosed within the past year). The authors utilized Poisson regression to calculate adjusted relative risks (ARR) with 95% confidence. They found that those who had been diagnosed with PTSD within the past year were more likely to have been in a physical fight within the past year and were at a moderately increased risk for high-risk drinking. Overall, the study's findings should be interpreted

cautiously. The authors utilized second-hand data that did not directly assess for the variables used in their study. Additionally, they did not report the entirety of their statistical findings or detail their statistical procedures, making it challenging to identify specific and significant findings and trends without having to take the authors words at face value. Despite these clear methodological and analytical concerns, results suggest the need for continued study into the varied implications of having a PTSD diagnosis, especially as it relates to interpersonal functioning, health risk or promoting behaviors, and other academic functioning.

As the nation's consciousness of PTSD has grown over the past one to two decades and as more service members are surviving modern wars at greater percentages than in previous wars, the need to better understand this diagnosis and its impact on SSM/Vs has also continued to grow. Another study, by Barry, Whiteman, and Wadsworth (2012) aimed to explore if posttraumatic stress symptoms (PTS) are associated with alcohol-related concerns and other academic outcomes, such as "human capital accumulation," defined as the "amount of education one attains as well as their relative academic success." The final sample consisted of 250 participants (134 male, 115 female) with (n = 78) and without (n = 53) combat experience, civilian students (n = 79), and ROTC students (n = 38) who were largely White (92%), from all branches of the military, and separated from the military for an average of 6.49 years. The authors found that SSM/V with combat experience reported higher symptoms of PTS and that PTS was positively associated with problem drinking regardless of service history or civilian status. The authors also found that PTS was negatively associated with educational self-efficacy for civilian students and SSM/V without combat experience, but no relationship

was found for SSM/V with combat experience or ROTC students and educational self-efficacy. In this sample, PTS was negatively associated with student's academic persistence regardless of service history status.

In the discussion, the authors spoke more about the "healthy soldier effect" which states that military personnel have overall better health and lower mortality rates, as compared to the general population. This nuanced discussion led to a call for more research exploring the differences between combat-trauma exposed SSM/V versus noncombat-exposed SSM/V. Furthermore, from a civilian versus military-affiliated perspective, more research is needed comparing the effects of non-military related trauma with military-related trauma on academic performances. Perhaps trauma in SSM/V is more likely to occur but once present, correlates to the same difficulties as the civilians with trauma experience. More research is needed to understand the nuances impact of both and implications for treatment and policy as a result. These findings and the postulation of the "healthy warrior effect" directly impact my work exploring resiliency in SSM/Vs through a positive psychology framework. The bulk of research, in the scant literature pool, has emphasized the negative impacts of service on college adjustment without enough attention brought to the strengths that service members bring with them to college campuses.

The public has associated excessive drinking with veterans for many years, but this association has mixed and nuanced empirical basis with regards to the student veteran population. Additionally, alcohol abuse and binge drinking are serious concerns on college campuses in general and have been found to be highly comorbid with the presence of a PTSD diagnosis (Barry, Whiteman, & Wadsworth, 2012). As such, the

focus on college adjustment for SSM/Vs has necessarily included exploration into the alcohol use and binge drinking patterns of this population. In 2012, 281 SSM/Vs (145) and civilian students (136) were surveyed (Barry, Whiteman, Wadsworth, & Hitt, 2012). The majority were male (175) and White, non-Hispanic (92%). The SSM/V participants were older (M = 31.21) than civilian students (M = 24.64) and tended to be married (46%; civilians = 10%). All branches of the military were represented in the sample. The authors ran a series of 2x2 ANCOVAs (military status: SSM/V vs. civilian and sex: male vs. female) and a series of hierarchical multiple regressions to explore the impact of mental health on drinking behaviors. Overall, the authors found no significant differences between the frequency of alcohol use in the past year or frequency of binge drinking for SSM/Vs or civilian students. However, when factoring in mental health correlates, such as depression, anxiety, or PTSD, SSM/Vs were significantly more likely to experience binge drinking behaviors. The results of this study debunk the myth held by society and institutions that SSM/Vs have more problematic drinking behaviors as compared to their civilian student counterparts. This is important to know as this knowledge can have a direct impact regarding the resources, stigma, and treatment available to SSM/Vs on campuses. With regards to my work in highlighting the strengths of student veterans on college campuses, and their similarities to their civilian counterparts, I find these results integral in making that point. Much research has focused on the uniqueness and the problems of SSM/Vs, which are important aspects of the literature. However, I hope to contribute to the other side of the story, lest we forget the commonalities among all students and the assets this particular population brings with them from their military identity and service.

Another major concern related to veterans in general is suicide risk, especially in light of influential Veteran Administration (VA) media campaigns that cite the number of veteran suicides daily. As a result, researchers have begun exploring suicidality in student veterans with Rudd, Goulding, & Bryan (2011) seeking to identify risk for suicide in a national sample of student veterans. In a final sample of 525 student veterans, these authors found the rate of suicidal ideation to be 46% with 20% of participants reporting suicidal ideation and a plan, 7% of participants reporting a previous suicide attempt, and 3.8% of participants reporting that a suicide attempt was likely or very likely. The authors then compared these rates to the rates of the general college student population using the ACHA (2011) data and found that the rates for student veterans were higher than the general student population. In particular, the general student population had a 6% risk for "seriously considering suicide" and 1.3% of participants having reported a previous suicide attempt.

Additionally, Bryan & Bryan (2015) attempting to fill this gap in the literature by exploring the lifetime, past-year, and past-month prevalence rates of suicidal ideation, plans, and attempts by SSM/V. Their nationwide sample included 422 college SSM/V of different sexes, military branches, racial/ethnic background, and age (M = 36.29, SD = 10.25). They used the self-report version of the Self-Injurious Thoughts and Behaviors Interview (SITBI) to assess suicidal ideation, plan, and attempts in the students. For incident rates of ideation, they found that 33.4% reported a lifetime incidence rate, 14.7% reported a past year incidence rate, and 7.6% reported a past-month incidence. For rates of suicide plans, they found 13.7% reported a lifetime incidence rate, 3.6% reported a past-year rate, and 1.9% reported a past-month incidence rate. For suicide attempts, they

found 6.9% reported a lifetime incidence rate, 0.7% reported a past-year incidence rate, and 0.5% reported a past-month incidence rate. Of note, the college SSM/V who reported being of Native American background were significantly overrepresented among lifetime incidences of suicidal ideation, plans, and attempts. Furthermore, those students who were married or in a committed relationship were significantly underrepresented among the lifetime rates of suicidal plans or attempts.

Though this study did not directly compare these rates to those of civilian students, the authors cited literature of civilian college student trends and noted that the rates of suicidal thoughts and behaviors between the two groups (SSM/V and civilians) are similar. The authors claim that a strengths-based approach and skills training should be added to suicide prevention planning for veterans. Concerning my own research, though I am not directly exploring suicide rates or trends, it's important to consider the similarities and difference both between student veterans and their civilian counterparts and among student veterans themselves. For instance, the literature has begun to hint there could be difference among combat versus non-combat college SSM/V. Moreover, when considering practice and policy implications, it will be important to consider the nuance of these findings and etiologies for much of the veterans' distress versus civilian students' distress. The strengths-based approach to intervention that these authors suggested is inherent in my own study exploring the assets and strengths that SSM/Vs bring with them to college that could potentially shield against adjustment concerns and the significant negative impacts of mental health issues.

Another study also set out to explore suicidal risk on a large, national scale. Blosnich and colleagues utilized the Fall 2011 National College Health Assessment data

to compare incident rates of self-harm, suicidal ideation, and suicidal attempts among SSM/Vs and civilian students (Blosnich et al., 2015). Their final sample included 27,774 participants, 2.6% of which identified as SSM/V with hazardous duty (*n* = 362) and without hazardous duty (*n* = 344). On average, the SSM/Vs were older (M = 30.6 years) than civilians (M = 22 years) but both SSM/Vs and civilians were similar in that the majority of both were enrolled in school full-time (SSM/Vs = 85.9%, civilians = 92.7%), were White (SSM/Vs = 74.5%, civilians = 70.2%), and heterosexual (SSM/Vs = 93.1%, civilians = 92.2%). Utilizing chi-square tests of independence, the authors found only two significant differences between SSM/Vs and civilians: 1) SSM/Vs experience higher odds of self-harm than civilians and 2) SSM/Vs with hazardous duty have higher odds of having a psychiatric diagnosis than SSM/Vs without hazardous duty. They found no significant difference between SSM/Vs and Civilians for suicidal ideation or suicide attempts. These results are in contrast to the Rudd et al. (2011) findings. However, there are several limitations to the current study. The data used was secondary and cross-sectional, there was a large difference in the number of participants in the comparison groups between civilian and SSM/V, and they were unable to clearly define certain, important constructs, such as hazardous duty. In light of these results, it seems clear that the field needs further study to better understand the suicide risk and trends for this population on college campuses.

In another study exploring the impact of PTSD on functioning for SSM/Vs, Ness, Middleton, and Hildebrandt (2015) recruited 214 student service members/Veterans (SSM/V) to assess the impact of self-reported PTSD symptoms on self-regulation learning ("a student's capacity to learn, use, and modify cognitions and motivations

during academic work"), academic motivation, and positive social relations. Their sample of 214 SSM/Vs was comprised mostly of males (77.8%), non-traditionally aged students (74.3% aged 25 or older), with 39.8% married or engaged. To assess for PTSD, they used the PCL-M while self-regulated learning was measured using the Motivated Strategies for Learning Questionnaire (MSLQ) and academic motivation was measured using the Personal Achievement Goal Orientation scale of the Patterns of Adaptive Learning Survey (PALS). Positive relations were assessed using the Positive Relations to Others subscale of the Ryff Scales of Psychological Well-Being. They found that SSM/Vs with higher ratings of PTSD symptoms experienced lower use of self-regulation learning strategies and had poorer academic motivations. However, these deleterious effects were buffered if the SSM/V experienced higher positive social relations. In other words, social support moderated the effects of PTSD symptomology on self-regulation learning and motivation. Unfortunately, those with PTSD were less likely to report experiencing positive social relations.

This study hints at ideas for my own research, such that the degree to which a SSM/V is resilient or not could account for their academic engagement and degree of social support utilization. In attempting to assess assets of Veterans, the ability to tap into their team mentality could be explored further through their ability to engage in social support, especially when institutions provide access to a student Veteran resource center on campus. The exploration of academic motivation and self-regulatory learning strategies could be used to better understand both the strengths and challenges that SSM/Vs face in higher education, especially in consideration of the presence of PTSD.

However, the measures used in this study to assess those constructs have yet to be validated in SSM/V populations.

Other researchers have intended to explore mental health in SSM/Vs, again using national data. Utilizing data from the Fall 2011 implementation of the American College Health Association-National College Health Assessment; ACHA-NCHA II, Cleveland and colleagues explored the prevalence of poor mental health symptoms over the past 12 months in student veterans and their age-matched civilian student peers (Cleveland, Branscum, Bovbjerg, & Thorburn, 2015). Overall, they utilized 1,614 respondents' data and ran pairwise comparisons of three matched groups: civilians and student veterans with hazardous deployment, civilians and student veterans without hazardous deployment, and student veterans with and without hazardous deployment. Their sample was comprised mostly of SSM/Vs (n = 1007, civilians = 607) and were mostly male (n = 1,067) and White (n = 1,218). Contrary to what others have reported in the literature, these authors found that student veterans with hazardous deployment experience were actually least likely to experience poor mental health as compared to their civilian counterparts and other student veterans without hazardous deployment experience. This runs counter to the conventional idea that those with combat experience will experience higher rates of poor mental health, such as depression, anxiety, or PTSD.

The authors suggest a couple reasons for the counter-intuitive findings. First, perhaps those veterans with the poor mental health were not represented in this sample because the poor mental health has prevented them from attending higher education. Second, the "healthy warrior effect," described in the literature, could be taking place. In other words, perhaps there are assets of military service, such as a greater coping,

maturity, and mental strength and resiliency, which should be considered along with the negative effects of military service when exploring college adjustment in veterans. The authors also note possible limitations, such measurement error in utilizing a pre-existing data set that did not use established measures of mental health (such as a PHQ-9 or PCL).

Regarding implications for my research, it seems there is a paucity of study done on a national level. Most studies include a single institution or limited region that limits the generalizability of the findings. I intend to use a nationwide recruitment effort but seek to obtain firsthand data rather than utilizing a pre-existing national dataset such as the NCHA. Furthermore, though unintentional in this study, the author's promotion of a strengths-based exploration of this population particularly inspired my work. My current study utilizes a positive psychology approach to exploring college adjustment for SSM/Vs. Specifically, I'm focusing on the impact of resiliency on their adjustment and ability to navigate a range of mental health concerns.

In another quantitative study exploring broadly the mental health correlates of academic adjustment, Campbell and Riggs (2015) sought to examine how psychological distress and social support impact academic adjustment for SSM/Vs. They hypothesized that increased psychological distress (defined through depression, anxiety, and PTSD) would negatively impact adjustment. Furthermore, they proposed that increased social support would have a positive impact on adjustment. The authors surveyed 117 veterans who has combat experience and who varied with regards to age (M = 32.5), gender (males = 83.8%), race (Caucasian = 78.3%), marital status (married = 53%), and branch of service. They assessed for anxiety using the GAD-7; for PTSD using the Impact of Event Scale-Revised (IES-4); for depression using the PHQ-9; for social support using

the Multidimensional Scale of Perceived Social Support (MSPSS); for academic adjustment using the Student Adaptation to College Questionnaire (SACQ). Results were somewhat unexpected and counterintuitive. Specifically, they found that higher anxiety contributed to poorer adjustment, which is consistent with prior literature, but depression was not significantly related to adjustment. Also surprising was that they found PTSD was positively associated with academic adjustment. More specifically, avoidance and intrusion clusters were positively associated with adjustment, but the hyperarousal cluster was negatively associated with adjustment. Their hypothesis that social support would be significantly related to adjustment was supported such that greater perceived social support was related to improved academic adjustment. However, they yielded mixed evidence for their hypothesis that psychological distress would impair academic adjustment. Given such nuanced findings, my work with resiliency hopes to offer explanation for counterintuitive findings such as these. In other words, perhaps with some SSM/Vs, those with certain traits such as greater resiliency, do not experience such negative impacts on their academic functioning, even with the presence of mental health concerns.

Another study explored similar constructs of mental health and the impact on adjustment to college for SSM/Vs. Schonfeld and colleagues (2015) recruited 173 college SSM/Vs to respond to an anonymous online survey as part of an exploratory study into the impact of behavioral, mental, and substance abuse concerns on college adjustment (Schonfeld et al., 2015). The majority of respondents were men (n = 145), White (77.5%), undergraduates (85.5%), with an average age of 30.56. The authors assessed for PTSD (using the PCL-C), for substance use (using the Alcohol, Smoking, and Substance

Involvement Screening Test—ASSIST), for depression (using the PHQ-9), and for health concerns (using the Veterans RAND 12 Item Health Survey—VR-12). The authors developed their own questions to assess for college adjustment.

The authors used chi-square tests to compare results between those who indicated having academic adjustment concerns (n = 49) and those who did not report having adjustment concerns (n = 124). They found that those who reported adjustment concerns were more likely to have been treated for mental health concerns while in the military, had been hospitalized for a military-related injury, and diagnosed with and treated for PTSD. Furthermore, those who reported adjustment concerns were more likely to have depression, anxiety, and PTSD. There were no significant differences found for substance abuse concerns or TBI between the two groups.

Overall, these findings support the notion that, while a large percentage of veterans enrolling in school may not experience adjustment concerns, a sizeable (28.3% in this particular study) proportion will. This has implications for how institutions should screen incoming student veterans and the support services that should be made available to them while in school. Rates of PTSD and depression seem to have significant impact on the level of adjustment for this population. Further research should attempt to identify barriers to accessing services for all SSM/Vs but particularly for those reporting mental and behavioral and/or adjustment concerns. Moreover, research should identify buffers to academic adjustment for those who may be experiencing both the mental and adjustment concerns and barriers to accessing help. My own study intends to explore such a buffer—resiliency—and how it can serve to aid SSM/Vs in their college adjustment.

In an effort to identify factors that could mediate or moderate the impact of service on mental health and adjustment, Romero, Riggs, and Ruggero (2015) conducted a path analysis study. They hypothesized the following: 1) that higher levels of avoidant coping would be associated with increased depression, anxiety, and PTSD, 2) that higher levels of problem-focused coping would associated with decreased symptoms of depression, anxiety, and PTSD, 3) social support from family would lead to decreased symptoms, and 4) that social support would moderate the effects of both coping styles (avoidant and problem-focused) on mental health symptoms. They recruited 136 SSM/Vs, most of whom were male (78.8%), White (77.4%), had been deployed to war (72.8%), and were cohabitating, married, or in a committed relationship (62.5%). They utilized the following assessment measures: the PHQ-9 to assess for depression, the GAD-7 to assess for anxiety, the IES-R to assess for PTSD, the MSPSS to assess for social support, and the Brief COPE to assess for their coping style. The authors found support for their hypothesis that avoidant coping was significantly linked to increased depressive, anxiety, and PTSD symptoms. They found no associations between problem-focused coping and psychiatric symptoms, contrary to theoretical predictions and past findings in the literature. The authors also found support for social support such that family support was associated with decreased anxiety and depression but was not related to PTSD symptoms. Furthermore, when SSM/Vs engaged in problem-focused coping and reported high levels of family support, they experienced decrease psychological distress.

These results point to needed directions for future research to explore mediating and moderating factors of adjustment. My study will explore how resiliency affects college adjustment for SSM/Vs, while accounting for mental health concerns. To date,

little study has accounted for intrapersonal characteristics of SSM/Vs and their adjustment experiences. This study by Romero and colleagues has begun to pave the way for future research to do so.

Comparing SSM/Vs to Civilian Students

An important underlying part of this discussion is the differences between civilian students and SSM/Vs. Few studies have taken a direct look at how civilians and SSM/Vs function similarly or differently in college. The studies that have attempted this have often used secondary data sets gathered by the NCHA which has limited their ability to assess the constructs of interest directly and soundly (e.g. Cleveland et al., 2015; Barry, 2015). However, to better understand the unique challenges and assets that SSM/Vs bring to college campus, perhaps above and beyond their civilian student counterparts, it is important to study the two groups together. In this way, researchers can obtain a clearer understanding of how they both adjust to college and can better inform institutions and practitioners regarding interventions and support options for both groups. In very recent years, a few researchers have attempted to study these groups together by collecting direct data. In 2017, Smith, Vilhauer, and Chafos compared civilian and SSM/Vs functioning in college across six domains (health, fitting in, emotional adjustment, productivity, perceived career support, and social engagement) with an additional analysis of the impact of trauma on all six domains. They predicted that SSM/Vs would differ from civilians on all domains and that trauma would impact functioning despite civilian or SSM/V status. Their final sample consisted of 445 civilian students and 61 SSM/Vs. Of the total sample, the majority were female (69%), between the ages of 18-21 (61%), and unemployed (72%). The authors did not provide more detailed descriptions of

their sample and they developed their own instrument for this study, which presents concerns with the validity of their measurement tool. As such, researchers should interpret results cautiously. However, they found that civilian students and SSM/Vs only differed on one domain, fitting in, such that SSM/Vs functioned worse than their civilian peers in fitting in. Students also functioned worse in this domain if they had been exposed to trauma, regardless of SSM/V or civilian status, but SSM/Vs were significantly more likely to have experienced trauma. Trauma did not affect the other domains of functioning. Furthermore, contrary to what one may expect, civilian students were more likely to experience concerns with emotional adjustment if they had experienced a trauma, but SSM/Vs were not.

These results seem to contradict a large body of the existing literature; however, they are not the first to find nuanced surprising findings regarding SSM/Vs and their adjustment. Specifically, some researchers have found that SSM/Vs adjust well, and sometimes better than civilians, to college—a phenomenon that is often cited as the "healthy warrior effect" (Waller & McGuire, 2011). It is important to note, however, that this study had significant limitations. First, the questionnaire used was not a standardized, validated measure. Second, the groups sample sizes were disproportionate, with the SSM/Vs having a small sample size. Third, perhaps this sample was not representative of civilian and SSM/Vs at large based due to the limited and particular nature of where the authors chose to recruit their participants. Despite these limitations, this study presents a potential model for use in my own research such that it provides more suggestion that there is more to the story when considering college adjustment for SSM/Vs. It is possible the strengths of veterans are going unexplored or being minimized and underrepresented

in the literature. More research is needed, on a large scale, to compare civilian students to SSM/Vs and to explore the strengths and assets of SSM/Vs.

Other researchers have shown interest in comparing the functioning and adjustment to college between civilian and SSM/V students (Whiteman et al., 2013). These authors, prompted by consistent findings in the qualitative studies that highlight the importance of social support in adjustment, chose to longitudinally track the development and impact of social support on adjustment for the two groups of students. Of the 380 participants, 199 were SSM/Vs (154 males, 45 females) and 181 were civilians (81 males, 100 females). The majority of both SSM/Vs and civilians were White (92% and 90% respectively) and enrolled full-time (90% and 82% respectively). SSM/Vs tended to be older (M = 29.41) than their civilian peers (23.67) and more likely to be married (34%) than civilians (8%). All branches, including the Coast Guard, National Guard, and Reserves, were represented in the sample. The authors used the Friend subscale of the Perceived Social Support Inventory to assess peer emotional support. They used the Brief Symptom Inventory-18 (BSI-18) to assess for depression, anxiety, and physical/somatic concerns. Alcohol use was measured using a one-item question from the National Institute on Alcohol Abuse and Alcoholism's Task Force on Recommended Alcohol Questions. Academic functioning was assessed four ways: 1) by GPA, 2) the Academic Motivation Scale (to assess amotivation), 3) Educational Degree Behaviors Self-Efficacy Scale and the social course self-efficacy subscale of the College Self-Efficacy Inventory (to assess educational self-efficacy), and 4) Persistence/Voluntary Drop-Out Scale (to assess for academic persistence decisions).

They repeated assessments three times across three semesters, resulting in one of the first longitudinal studies of SSM/Vs and college adjustment.

The authors found that at Time 1, SSM/Vs reported less peer emotional support than civilians did, however, both groups experienced similar rates of growth over time. However, given that SSM/Vs start with less support, they never reach the same level of support as their civilian peers. Furthermore, emotional support was associated with better adjustment and lower rates of mental health concerns for both groups; however, there was a stronger protective effect of emotional support for civilians than for SSM/Vs. This suggests that peer emotional support may not be enough to buffer against mental health concerns for SSM/Vs. These findings highlight important and nuanced differences between civilian students and SSM/Vs. While social support is important, there must be other factors that can explain and contribute to positive adjustment for SSM/Vs. I hope to contribute to the literature by exploring these possible other factors, such as resiliency, and how a strengths-based model can account for positive adjustment in SSM/Vs.

Positive Psychology Framework

For decades, the study of positive psychology has emerged into the consciousness of psychology scholars and laypersons alike. In 2000, the millennial issue of the American Psychologist was devoted to the science of positive psychology (Seligman et al., 2005). This science does not seek to erase or discount the important study of pathology and human suffering, but rather seeks to add balance to the discussion regarding the human experience. Much of life is experienced on a continuum and positive psychology's goal is to bring awareness to the strengths and positive aspects of emotion, character, and institutions (Butler & Kern, 2016; Seligman et al., 2005).

The PERMA model, described by Seligman, details five facets of wellbeing, specifically positive emotions, engagement, relationships, meaning, and accomplishment. These are thought to impact an individual's overall wellbeing—which is largely understood as a dynamic state of functioning in which an individual functions well across multiple psychosocial domains, and is not simply the absence of negative functioning or experiences (Butler & Kern, 2016). Positive emotions refer to the feelings of contentment and joy, and are thought to range in their level of arousal (e.g. from excitement to calmness). Engagement is understood as the ability to be involved and absorbed in an activity. Relationships refer to having positive relations with others and feeling a sense of support. Meaning is defined as having a sense of purpose and a belief that one's life matters. Finally, accomplishment refers to the perception of achievement, which can at times be measure objectively (e.g. awards, promotions). Though not part of PERMA, others have added the concept of health—referring to physical health—as another important component of wellbeing (Butler & Kern, 2016).

Resiliency

Resiliency, a construct housed within positive psychology, is also thought to be complex and encompassing of two core elements: adversity and overcoming said adversity (Masten, 2001). Resiliency is thought to be a construct that incorporates both internal and external resources, rather than viewed as a singular personality trait (Luthar & Cicchetti, 2000). More specifically, and in line with the positive psychology framework, a resilient individual has faced adversity yet has employed critical psychological resources and navigated social institutions well to adapt and overcome such adversity. Resiliency is not the absence of adversity, in fact, to be resilient one must

have faced adversity. Prevailing theory also suggests that resiliency is not a singular personality trait, rather it is thought of as a set of psychosocial skills used to adapt effectively when faced with adverse circumstances.

Research on resiliency has historically looked at children and families and has emphasized the notion that resiliency is context dependent, and as much about the environment, one is in as about the individual themselves (Ungar, 2008). In other words, to say that an individual is resilient would be incomplete without first understanding the environment they are in and the resources available to them to help them adapt effectively in the face of adversity, which contributes to their resiliency. In this way, it is fathomable that culture and diversity influence the notion of resiliency, depending on the context. Michael Ungar studied over 1500 children, globally, and determined a more culturally relevant understanding of resiliency. He proposed four important considerations: 1) that there are global and specific aspects of resilience, 2) different aspects of resiliency have different saliency depending on the culture, 3) patterns of resiliency in children are shaped by a child's cultural context, and 4) how tensions between individuals and their culture are resolved shape resiliency (Ungar, 2008).

An important contribution to the resilience theory literature was published decades ago. The study was one of the first of its kind being both longitudinal and interdisciplinary in its exploration of resilience in a sample of 698 children born in Kauai (Werner, 1989). The sample was culturally diverse and included individuals of Japanese, Philippino, and Hawaiian descent. Over time, the researchers found that of the original 698 children, 201 were classified as high-risk from the start, and of those high-risk children, about one-third appeared to be doing well at ages 10 and 18, compared to the

remaining two-thirds who were not (Masten, 2014; Werner, 1989). At about age 32, the individuals who were doing well early in life, and were classified as resilient, were continuing to do well while a number of individuals who were initially not doing well "staged a recovery" and made significant improvements on their lives (Masten, 2014; Werner, 1989). Though the researchers did not set out to study resiliency directly, they nonetheless identified three important types of protective factors that have helped shape resilience theory in the years following. These protective factors are 1) personal factors (such as intelligence, locus of control, communication skills), 2) family ties (in the context of emotional support during periods of stress), and 3) external factors (such as school, work, or religious systems that offer support) (Werner, 1989). Given that these factors can evolve over time (i.e., we may lose family or strengthen those bonds, or we may obtain an education or not due to various causes), one can see how resilience may change over time.

Since that study, there has been a significant interest in understanding resilience as a construct in a variety of contexts such as with military and veteran populations (Cacioppo et al., 2015), posttraumatic stress disorder (Hoge et al. , 2007), mothers who've experienced abortion (Major et al., 1998), college students (Murrell et al., 2018; Chung et al., 2017; Hartley, 2012), firefighter paramedics (Straud et al., 2018), and more.

Resiliency literature has historically focused on the constructs impact on mental health and psychological well-being in addition to providing insight into how individuals cope with and endure tragedy and traumatic experiences. However, resiliency is now being largely understood as a construct that many can possess, rather than the few, and as a combination of factors, such as self-efficacy, attitudes towards self and the future, and

social relatedness, that the average person can employ when faced with any degree of stress (Smith et al., 2016). Researchers in Canada sought to explore how one's resiliency can enhance adaptive coping skills in a sample of 424 undergraduate university students (Smith et al., 2016). The authors used hierarchical multiple regression analysis to determine the relationship between resiliency and three coping styles (task-oriented, emotion-oriented, and avoidance-oriented coping) and each of their impacts on mental health outcomes (depression, anxiety, satisfaction with life, negative affect, and stress). They found that individuals with greater resiliency were less depressed, less anxious, had less negative affect, and greater satisfaction with life. Moreover, they found that high personal resiliency did buffer against the effects of the less adaptive coping style, namely emotion-oriented coping, on depression and negative affect. Given these finding, the current study expects to see similar findings such that higher personal resiliency will be associated with fewer adjustment concerns and fewer and less severe mental health concerns.

A key distinction in the resiliency literature is its benefit above and beyond its place a simply the antonym to vulnerability. Disease models of pathology have long explored risk factors and protective factors with respect to disease vulnerability. The notion of resiliency, however, as Dr. Michael Rutter points out, highlights the process of how protective factors interact with risk factors to predict successful and resilient outcomes. He suggests that this process is crucial to understanding why some individuals thrive after adversity and others fall apart (Rutter, 1987). In understanding this important shift from variables to processes, we begin to understand the immense variability in outcomes of individuals with similar struggles; we see how coping mechanisms and

environmental factors play a role in helping, or hindering, individuals from overcoming adversity. Specifically, prevailing models of resiliency highlight the need for family cohesion, social support (perceived and actual), openness to opportunities, sense of self-efficacy and mastery, and positive attitudes towards the future (Bonanno, 2004; Hoge et al., 2007). It is the process by which these interact that can help determine one's resiliency in the face of stress and trauma. In other words, resiliency is more than the simple absence of pathology but rather an interaction of protective factors that help an individual maintain stable functioning during aversive life experiences, rather than fall prey to consistent subthreshold or threshold pathological responses and maladaptive functioning (Bonanno, 2004).

Resiliency and College Adjustment

Given the theoretical shift in thinking about resiliency as a more common construct and as a process of protective factors and coping styles, it makes sense that it is beginning to be more widely studied and utilized more broadly as an intervention, in clinical and non-clinical settings. Though sparse, the study of resiliency has begun to emerge in the literature of college adjustment. One researcher found further support for the notion that rather than the adversity or stress itself, it is how one responds to and copes with the stress, such as the stressors of higher education, which ultimately predicts the outcome (Hartley, 2012). In his sample of 605 undergraduate students, he found that those students seeking mental health services, as compared to the non-help seeking, general student population, reported lower levels of resiliency, higher levels of psychological distress, and greater dissatisfaction with social supports. Those individuals

were less likely to believe they could successfully overcome the stress and pressure of college (Hartley, 2012).

Only one study could be found that looked at resiliency and college adjustment directly in a sample of student veterans and this study was a dissertation completed in 2012 by Sharon Young. Her sample size was relatively small (n = 77) but was diverse with 60% of participants identified as White, 23% as Hispanic, and 10% as African American. The majority of her sample were male (86.6%) and undergraduate college students (70.2%). She specifically explored the relationship between risk factors (such as combat exposure and length of deployment) and two aspects of resilience (social support and dispositional resiliency) with mental health outcomes, college adjustment, student stress, and military to civilian adjustment. She found that only social support, defined in her study as an aspect of resilience, was significantly positively related to college adjustment. Her work has obvious implications for my own study. Specifically, I hope to more thoroughly explore the relationship between resilience and college adjustment by considering military affiliation (i.e. veteran versus national guard/reservist status) and combat versus non-combat exposure in a much larger sample size. Moreover, her work focused more on mental health outcomes while I intend to explore college adjustment specifically and more robustly.

Resiliency and SSM/Vs

To date, the literature on resiliency with military service members has focused on veterans and active duty members but not on student service members/veterans. This gap is concerning considering the general dearth of knowledge of SSM/V college adjustment and the rising concern and pressure for institutions to meet the needs of this population

more effectively. As the concept of resiliency employs both the environment and institutions as well as the individual, this area of study lends itself neatly to concept of college adjustment for SSM/Vs. This population has well documented concerns with transitioning from military life to civilian college environments and they experience a number of institutional concerns and lack of resources in some cases, such as feeling unsupported by college administrators, struggling to access VA education benefits, and feelings of isolation and a lack of community on campus (Livingston et al., 2011). Therefore, it is important to explore the particular aspects of the college environment and level of resiliency in SSM/Vs to better understand and support these students in their academic pursuits.

Resilience incorporates a consideration of protective and risk factors for overcoming adversity. Blackburn and Owens (2016) surveyed 191 combat veterans from Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF) and Operation New Dawn (OND), commonly referred to as OIF/OEF/OND, to explore if resiliency would buffer against the effects of PTSD on these veterans. Specifically, they hypothesized that higher levels of combat exposure and intrusive rumination, and lower levels deliberate rumination and resilience would predict higher PTSD symptoms. Their sample was mostly male (86%) and White (82%). They had an average age of 31.49 and 50% of them were currently enrolled as students. To assess for combat exposure, they used the Combat Exposure Scale (CES); for PTSD they used the PCL-M; for rumination, they used the Event-Related Rumination Inventory (ERRI); for resilience they used the Connor-Davidson Resilience Scale (CD-RISC). The authors found that increased exposure to combat was predictive of greater PTSD symptom severity as was intrusive rumination.

They also found that resiliency had a significant, negative relationship with PTSD severity such that higher resiliency was associated with decreased vulnerability to PTSD. Moreover, resiliency moderated the effects of combat exposure on PTSD severity, serving as a protective factor for this sample of veterans. Contrary to their expectation, however, deliberate rumination was not significantly related to decreased PTSD symptom severity, though it did trend toward significance. These finding are promising and relate directly to my own work in exploring the impact of resilience on college adjustment with SSM/Vs.

Another recent study explored resilience in student service members/veterans using a constructivist grounded theory approach (Reyes et al., 2017). Given that no model or framework exists to explain the process of resilience in veterans, the purpose of their study was to explore how SSM/Vs construct and enact resiliency in the academic and personal lives. The interviewed 20 SSM/Vs and used the CD-RISC-10 to assess for resiliency and the PCL-5 to assess for PTSD symptom severity. The majority of their sample were men (*n* = 16), receiving disability benefits *(n* = 13), and married or in a committed relationship (*n* = 16). The participants ranged in age from 26-50 years old, and represented the four core branches (Army, Air Force, Navy, and Marines). The mean response score for the CD-RISC-10 was 31.85, indicating greater resilience, and the mean score on the PCL-5 was 23.05, which is below the cut-off score. There was negative correlation between resilience and PTSD, but this did not reach significance in this sample. However, it's important to note that this is a very small sample size, limiting the amount of statistical power. Their qualitative results yielded an overarching theme of "integrating" which was comprised of three subthemes: 1) aspects, 2) expressions, and 3) enactments. Integrating appeared in two aspects: "transition from military to civilian life" and in "harmonization of personal and

academic life." The expression of integrating emerged in the themes of "dissonant self" (in which the SSM/V resisted their new civilian life) and "integrated self" (in which the SSM/V found balance in their challenging experiences). Lastly, resilience was enacted in three components: 1) "recognizing," in which the SSM/V acknowledged their dissonance, 2) "resonating," in which the SSM/V amplified aspects of their veteran identify, especially those related to achieving academic goals, and 3) "reactivating," in which the SSM/V used skills developed in the military and applied them to their current situation. These findings shed important light on the implications of resiliency on college functioning and adjustment for student service members/veterans. These qualitative findings are promising for those, like myself, intending to explore this concept from a quantitative approach and fill a gap in the literature regarding resiliency and the college student veteran.

In 2016, researchers explored resilience in a sample of 191 veterans of the Iraq and Afghanistan wars (Blackburn & Owens, 2016). Their sample consisted of mostly males (86%) and a mean age of 31.49 years (SD = 7.56). The majority were White (82%), with 3% African American, 3% Asian American, 1% Native American, and 7% other. Half of the participants served in the Army (50%), with 26% in the Marines, 14% in the Air Force, 12% in the Navy, and fewer than 1% in the Coast Guard. Almost half (49%) had some college experience or a college degree (33%). All individuals had combat experience during their deployments. The authors sought to explore the moderated effects of resilience on combat exposure and PTSD symptoms. They found that individuals with higher resilience were less likely to experience PTSD. Furthermore, those with lower resiliency experienced greater PTSD symptom severity as the severity of combat exposure increased. The results have implications for my hypotheses such that it's expected that individuals

with higher resilience will have lower mental health concerns and more positive adjustment to college.

Additionally, in a sample of 127 OIF/OEF veterans, Elliott, Hsiao, and colleagues (2015) explored the impact of resilience on adaptive coping and mental health while controlling for combat experience and traumatic brain injury. Their sample mean age was 37.64 (SD = 10.54) and had an average of 14.17 years of education (SD = 2.54). The majority were male (n = 107), White (n = 80), and had a service-connected disability (n = 82). They found that individuals who were resilient had greater perceived social support, less avoidant coping, and less psychological inflexibility along with lower levels of PTSD and depression, regardless of combat exposure or brain injury. This provides positive, important implications for my work when assessing the impact of resiliency on adjustment directly. However, my work will also explore how different military affiliated statuses (i.e. veteran versus National Guard) may moderate the relationship between resilience and adjustment.

In this chapter, I reviewed the literature regarding veterans' reintegration into civilian life after military service with a focus on adjustment to college. Though veterans encounter numerous challenges to reintegration and assimilation back into civilian life, they also carry with them a number of strengths and transferable skills that can serve them well in college. It is with this understanding that I chose to utilize a positive psychology framework with a focus on resiliency theory to highlight veterans' ability to adjust well to a college environment, despite the challenges they face. As such, I reviewed the literature regarding resiliency theory and positive psychology, both in civilian and military populations. In the next chapter, I will outline the specific methodological approaches to

this study, including procedures, analytic methods, participants and recruitment, and details about the measures.

CHAPTER III

METHODOLOGY

Research Design

The study utilized a non-experimental, correlational design. The study was non-experimental because there was no randomized assignment of participants to different groups. Instead, using a correlational design, I drew conclusions about the relationship between multiple constructs without making causal inferences (Licht, 1995). The data collected was quantitative and was collected through online surveys.

Participants

The sample was comprised of participants from Amazon's Mechanical Turk (MTURK) and from 10 universities in the United States, spanning the Midwest, Northeast, Southeast, and Rocky Mountain/Western regions. Participants selected were 18 years of age or older, current or former military service members in any branch of the United States military including the National Guard and Reserve forces, and were currently enrolled in higher education for either undergraduate or graduate/professional degrees. There was a total of 661 respondents to the MTURK Trials 1-2 screening surveys (see details described in Procedures section) and a total of 209 respondents to the full study, across both MTURK and university recruitment sources. Participants who did

not meet eligibility requirements and/or who failed one or more of the five attention check items embedded in the study were removed from consideration. The final sample was comprised of 123 SSM/Vs (MTURK participants *n* = 6, university participants *n* = 117).

Participants were diverse across many aspects. They ranged in age from the lowest age bracket, 18-24, to the second highest age bracket, 55-64 (ages 18-24 = 32 [26%], ages 25-34 = 50 [40.7%], ages 35-44 = 31 [25.2%], ages 45-54 = 8 [6.5%], ages 55-64 = 2 [1.6%], and ages 65+ = 0). Both men (*n* = 87, 70.7%) and women (*n* = 36, 29.3%) participated, with no one identifying as transgender or other. The majority of participants identified as White (*n* = 102, 82.9%), with Hispanic/Latino/Mexican Americans comprising 6.5% (*n* = 8), Asian/Pacific Islanders comprising 3.3% (*n* = 4), African Americans comprising 2.4% (*n* = 3), and Native Americans comprising 0.8% (*n* = 1) of the sample. Five participants (4.1%) identified as other/multi-racial (Native American and White = 2, Hispanic and White = 1, Asian and White = 1, and Black and White = 1). The sample largely identified as heterosexual (*n* = 117, 95.1%) with very few people identifying as Gay/Lesbian (*n* = 4, 3.3%), Bisexual/Pansexual (*n* = 1, 0.8%), or other ("fluid;" *n* = 1, 0.8%).

The participants varied in certain life experiences and socioeconomic factors. Nearly half identified as married (*n* = 58, 47.2%) while others identified as single/never married (*n* = 38, 30.9%), single/divorced (*n* = 6, 4.9%), in a committed relationship of 6+ months (*n* = 15, 12.2%), cohabitating (*n* = 4, 3.3%), or separated (*n* = 2, 1.6%). A majority did not have children (*n* = 74, 60.2%), while a sizable minority did (*n* = 49, 39.8%). To gauge socioeconomic status, participants were asked to identify their current

annual income level; six (4.9%) preferred not to say. However, most identified as making under $15,000 (*n* = 36, 29.3%), and others reported an income between $15,000 and $29,999 (*n* = 23, 18.7%), between $30,000 and $44,999 (*n* = 11, 8.9%), between $45,000 and $59,999 (*n* = 11, 8.9%), between $60,000 and $69,999 (*n* = 11, 8.9%), or over $70,000 (*n* = 25, 20.3%).

Given confusing wording in the demographic questionnaire, realized only during post-data collection review, the following demographic variables were determined by line-by-line analysis by the researcher: undergraduate or graduate student status, occupational status, and full or part-time student enrollment. A number of items in the questionnaire were considered when classifying each participant in the above categories, such as highest level of education completed, current university and GPA, duration of enrollment, and whether or not they indicated an employment or enrollment status. The majority of participants were undergraduate students (*n* = 76, 61.8%); however, a fair number of graduate/professional students were included (*n* = 47, 38.2%). Only 88 participants selected an employment status: full-time (*n* = 36, 29.3%), part-time (*n* = 39, 31.7%), and unemployed (*n* = 13, 10.6%); some participants specified they were employed through a veteran/VA work study (*n* = 16). Likewise, only 88 participants selected a student status: full-time enrollment (*n* = 76, 61.8%) or part-time enrollment (*n* = 12, 9.8%).

The sample varied in their military affiliations and experiences as well. The majority identified as a veteran/retired from active duty service (*n* = 87, 70.7%) while fewer identified as National Guard (*n* = 22, 17.9) or Reserves (*n* = 14, 11.4%). Given that the Army is the largest branch of the military, it is unsurprising that the largest

number of participants identified as serving in the Army (*n* = 36, 29.3%). The Air Force comprised 21.1% (*n* = 26), the Marine Corps comprised 17.9% (*n* = 22), the Navy comprised 14.6% (*n* =18), and the Coast Guard comprised 1.6% (*n* = 2). A number of participants specified serving in the National Guard/Reserves (*n* = 19, 15.4%) rather than identifying a specific branch. They ranged in length of time since discharging from the military service. A large number reported still serving (*n* = 40, 32.5%), whereas some were 1 year post-service (*n* = 15, 12.2%), 2-5 years (*n* = 36, 29.3%), 6-10 years (*n* = 18, 14.6), 11-19 years (*n* = 12, 9.8%), or 20+ years post-service (*n* = 2, 1.6%). In the military, pay grades are often associated with rank and years of service, across all branches. To gain an estimate of rank, participants were asked to identify their highest pay grade achieved. A sizeable number (*n* = 50, 40.7%) indicated a lower enlisted rank (E-1 through E-4), with a comparable number (*n* = 55, 44.7%) identifying as an non-commissioned officer (NCO)/upper enlisted rank (E-5 through E-9), while the remaining participants identified as a Warrant officer (*n* = 1, 0.8%; W-1) or Commissioned Officer (*n* = 17, 13.9%; 0-2 through 0-5). The majority of participants indicated they were not exposed to combat (*n* = 78, 63.4%), though many participants did indicate combat exposure (*n* = 45, 36.6%).

Measures

This study included a number of self-report measures and a demographic questionnaire. To assess for possible mental health concerns, the following measures were used: the Patient Health Questionnaire (for depression), the Generalized Anxiety Disorder Scale (for anxiety), and the Posttraumatic Stress Symptom Checklist for DSM 5

(for PTSD). To assess resilience, the Connor-Davidson Resilience Scale was used and to assess college adjustment, the Veteran Adjustment to College Scale was used.

Demographic Questionnaire

Demographic information was collected for each participant and described in detail above. The demographic questionnaire asked SSM/Vs about several factors, such as age, gender, race/ethnicity, income level, student status, their branch of military service, relationship status, parental status, military affiliation (NG, reserve, or Veteran/retired), and length of time since their military service ended. An adapted version of the unpublished Background Information Questionnaire—Student Veteran Version was utilized to obtain relevant background information related to this population. Permission to use this unpublished questionnaire was awarded by the researchers who created it and have used it in their own research with SSM/Vs (Riggs & Campbell, 2013).

Connor-Davidson Resilience Scale

The Connor-Davidson Resilience Scale (CD-RISC; Campbell-Sills & Stein, 2007) is a 10-item abridged version of the original 25-item CD-RISC (Connor & Davidson, 2003). The self-report scale measures resiliency with each item scored on a 5-point Likert-type scale ranging from 0 (*not true at all*) to 4 (*true nearly all the time*) with higher scores indicative of greater resiliency in the face of adversity. The original 25-item scale measured multidimensional aspects of resiliency, including self-efficacy, sense of humor, faith, trust in one's instincts, and secure relationships, but factor analysis did not support the use of subscales. Rather, use of total scores on the scale were recommended (Connor & Davidson, 2003), lending credence to the conceptualization of resilience as an outcome or by-product of adversity. The one-factor/total score structure led to the

refinement and use of the 10-item scale, which is being used for this study. The 10-item measure was found to have high internal reliability (Cronbach's $\alpha = .85$) and validity. Strengths of this measure are that the 10-item scale was normed on an ethnically diverse population as well as normed on a population of adults with childhood maltreatment and trauma, given credibility to the construct being measures. However, limitations of this measure include the lack of demographic factors included in the original sample, including income, presence of adult trauma, and education, and the fact that the 10-item measure hasn't been used with a veteran population yet. However, some researchers have found similar or better reliability in samples of American college students, with Cronbach's alpha ranging from .88 to .90 (Chung et al., 2017; Hartley, 2012) which provided promise in using this measure with a sample of college students. Furthermore, the original 25-item CD-RISC was given to a sample 53,692 Air Force service members (Bezdjian et al., 2017). In their sample, the mean age was 20.16 (SD=2.25), with 82% of the sample male, and 94.3% having at least a high school diploma. The majority identified as White (66%), with 15% Black, 11% Hispanic, 4% Asian, and 4% other. These authors found strong internal consistency (Cronbach's $\alpha = .91$). Given the strength of the results in the Air Force population and considering that the 10-item measure is more psychometrically sound and refined than the 25-item measure, there was reasonable support to suggest using the 10-item measure for this study. Moreover, the authors of the measure have called for more validation studies in various populations for which this study answered that call. Sample items from the CD-RISC-10 include "I can deal with whatever comes" and "I am not easily discouraged by failure."

Veterans Adjustment to College Scale

The Veterans Adjustment to College scale (VAC; Young, 2017) is a 12-item self-report measure of SSM/V adjustment to college with each item scored on a 5-point Likert-type scale ranging from 5 (*strongly agree*) to 1 (*strongly disagree*), with higher scores indicative of greater/better adjustment to college. The measure assesses college adjustment across three-factors, belonging, social support, and student stress, but is recommended for use as a total scale. There are four reverse scored items: 1, 3, 5, and 10. The measure was developed through focus groups of Post-9/11 student veterans as well as input from experts in the field, demonstrating content validity for the measure. A panel of students further refined the measure adding to the face and content validity of the measure. The measure was then normed on a sample of 391 college student service members/veterans across three public universities from three geographic regions in the US with demographic factors similarly representative of the armed forces. In particular, the mean sample age was 31.3 years and 74% of the sample were male. The majority of the sample were Caucasian (73.9%), upperclassman (65%), and either married (41%) or divorced (11%). Moreover, the majority identified as veterans (60.9%) with fewer identifying as National Guard/Reserves (18.4%). Confirmatory factor analysis found evidence for three subscales, with moderate to strong internal consistency for each scale: belonging (5 items, Cronbach's $\alpha = .72$), social support (3 items, Cronbach's $\alpha = .80$), and student stress (4 items, Cronbach's $\alpha = .71$). Though only recently published, a strength of this measure is that it was found to have good internal reliability (Cronbach's $\alpha = .82$) and was normed on the population of interest for the current study. Moreover, the scale was negatively correlated with measure of stress (-.44), depression (-37), and PTSD (-.53), demonstrating appropriate divergent validity for the measure as it is

expected that better adjustment would be conversely related to significant mental health concerns. Limitations of this measure include the fact that it was not compared to other measures of college adjustment thereby lacking data regarding convergent validity. Additionally, it has yet to be used with other samples of SSM/Vs. However, given that the measure had promising initial psychometric properties and conceptually captures the experience of college adjustment for this population, there was reasonable support for using the measure in this study. Sample items of the VAC include, "The military has prepared me to handle the stress and responsibility of college" and "The immaturity of some of my classmates makes class more difficult for me."

Patient Health Questionnaire

The Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001) is a 9-item self-report measure of depression symptoms. The items are answered on a 4-point Likert-type scale ranging from 0 (*not at all*) to 3 (*nearly every day*), based on the past two weeks, with higher scores indicating a greater likelihood of meeting diagnostic criteria for Major Depressive Disorder (MDD). Specifically, if a respondent endorses five or more of the symptoms with a rating of two or higher there is a high likelihood that the respondent may meet diagnostic criteria for MDD. The measure was originally developed based on a sample of 6,000 participants, aged 18 years or older, recruited from primary care clinics and from obstetrics-gynecology (ob-gyn) clinics. In the primary care clinics, the mean age was 46 (SD=17), and the majority of the sample were female (66%), White (79%), with either some college experience (27%) or a college degree (27%). In the ob-gyn clinics, 100% of the participants were female, with a mean age of 31 (SD=11). There sample was comprised of White (39%), African American (15%), and Hispanic (39%)

participants, the majority of whom were married (52%), with either a high school diploma (32%) or less (27%). The questionnaire was found to have strong internal consistency (Cronbach's α = .89 from primary care clinics; Cronbach's α = .86 from ob-gyn clinics). Content and construct validity were established by comparing scores on the measure to independent evaluations by a mental health professional and assessing correlation of scores with diagnoses of depression in the sample. Sample items from the PHQ-9 include "little interest or pleasure in doing things" and "feeling tired or having little energy."

Generalized Anxiety Disorder Scale

The Generalized Anxiety Disorder scale (GAD-7; Spitzer et al., 2006) is a 7-item self-report measure of anxiety symptoms. Items are answered on a 4-point Likert-type scale, ranging from 0 (*not at all*) to 3 (*nearly every day*), based on the past two weeks, with higher scores indicating greater severity of generalized anxiety. The scale has been shown to have excellent reliability (Cronbach's α = .92) and good convergent validity with other measures of anxiety, such as the Beck Anxiety Inventory (r = .72; Spitzer et al., 2006). The scale was validated in two phases by the authors, including a total sample 2740 participants. The mean age was 47.4 (SD=15.5). The majority were female (65%), White (80%), married (64%), and had some college experience (62%). Convergent validity was established through significant correlations with another established measure of anxiety, the Beck Anxiety Inventory (r = 0.72). Strengths of this measure include the fact that it was normed on a large, diverse sample of individuals from diverse settings. The measure also demonstrated criterion validity. Specifically, individuals who scored high on this measure also scored high on other measures of depression, an expected

correlation. Sample items include “trouble relaxing” and “worrying too much about different things.”

Posttraumatic Stress Disorder Checklist for DSM 5

The Posttraumatic Stress Disorder Checklist for DSM 5 (PCL-5; Blevins et al., 2015) is a 20-item self-report questionnaire answered on a 5-point Likert-type scale, ranging from 0 (*not at all*) to 4 (*extremely*) that measures symptoms of posttraumatic stress across all DSM 5 criterion requirements: re-experiencing (5 items), avoidance (2 items), negative alterations in cognitions and mood (7 items), and hyperarousal (6 items). Higher scores on this measure indicate a greater likelihood of meeting criteria for Posttraumatic Stress Disorder. Specifically, scores higher than the 33 are considered significant. For each individual item, ratings of two or more are considered significant endorsements of a symptom. Blevins et al. (2015) found high internal consistency for the measure (Cronbach’s $\alpha = .95$) and strong convergent and divergent validity. The measure was originally normed on two samples. The first sample was comprised of 278 participants, the majority of whom were female (70.9%) and Caucasian (81.3%). The mean age of the sample was 19.96 (SD=2.65). In the first sample the authors found strong internal consistency ($\alpha = .94$), good test-retest reliability ($r = .82$), and moderate convergent (rs = .74 to .85) validity. Furthermore, they found appropriate discriminant (rs = .31 to .60) validity with measures assessing dissimilar constructs. The second sample consisted of 557 participants, the majority of whom were female (75.2%) and Caucasian (85.5%). The mean age was 20.20 (SD=2.72). The authors found similar psychometric validation. In particular, they found high internal consistency (Cronbach’s $\alpha = .95$) and patterns of criterion and discriminant validity similar to the first sample’s findings.

Sample items from the PCL-5 include “repeated, disturbing, and unwanted memories of the stressful experience?” and “feeling jumpy or easily startled?”

Procedures

Institutional Review Board (IRB) approval was obtained February 20th, 2020 and data were collected from February 20th through April 17th, 2020. An a priori power analysis was conducted, using the G*Power 3.1 software (Faul et al., 2009) which yielded a needed participant sample size range of 90-174. Given the unprecedented circumstances of a worldwide pandemic (i.e. COVID 19 outbreak) occurring during the time of data collection, negotiations regarding an acceptable sample size were discussed among this researcher, the dissertation methodologist and the dissertation chairperson. While I strived to obtain a sample size nearer to the high end of the predicted range, responses from new participants slowed mid-way through the collection period. At that point, the committee and I agreed to remain flexible and accept a final total sample size of 123.

There were no foreseeable risks associated with study participation, other than potentially minor distress due to reflecting on past and/or current experiences, mental and physical health concerns, and/or current academic adjustment concerns. To safeguard against any potential distress, students were provided a list of resources that they could utilize, including the Veteran Crisis Line number (1-800-273-8255, press 1 for veterans), prompts to contact their University’s counseling center, and the contact information of the current study’s chairperson. To date, no participants have contacted either this researcher or the dissertation chairperson with any mental health concerns or to request a referral. While no direct foreseeable benefits of participation were evident, the data

gathered has the potential for creating practical, clinical, and institution change for future SSM/Vs. There were no known conflicts of interest for this researcher in conducting this study.

University Recruitment

I recruited participants from two sources: 1) directly from 10 universities throughout the country and 2) through Amazon's Mechanical Turk (MTURK) platform. After a review of both the Military.com and the MilitaryTimes.com's lists of best colleges for veterans for 2019 and 2020, a final list of 22 schools was formed. Only those schools with the following criteria were considered: 1) a director of veteran's services was identified or a veteran services/resource program/center for the college was advertised, 2) a direct phone number and/or email address for the director and/or center were found on the college's website, and 3) someone other than a VA Education Benefits certifying official was identified on the college's website where SSM/V questions/inquiries could be directed. A total of 22 schools were outreached to directly with up to five email attempts (one every two weeks) or two phone calls (after three unsuccessful email attempts). Three schools declined to participate, with one citing their university's restrictions on sending mass emails that did not pertain to COVID-19 during that time. Five schools never responded to any outreach attempt, one school repeatedly blocked email attempts, and three schools agreed to participate but did not follow through, leaving a final pool of 10 universities from which data was collected. Schools were instructed to return a statement of participation on their university's letterhead; a sample statement was provided for their reference and ease. The statement was then submitted to the IRB as a modification and, once approved, the university was sent the

recruitment email template and flyer and asked to share both with their SSM/V population. Students then followed the link found in the recruitment email or flyer to take the online study at SurveyMonkey.com.

First, informed consent was obtained without entering any identifying information. Next, if consent was given, students were prompted to complete the study via the online Survey Monkey platform. Demographic information was obtained first with the self-report measures following in randomized order. Participation in the study was anonymous and, according to Survey Monkey analytics, took an average of 11 minutes to complete. All responses were kept and stored securely on a password protected flash drive. Finally, upon completion of the study, participants were given the option to enter their email in a raffle for the chance to win one of five Amazon gift cards, valued at $20 each. Entries for the raffle were collected at a separate survey link and not connected to the participants study responses. Five emails were randomly selected, using an online random selection generator, and those selected were awarded and sent their gift card via email.

Mechanical Turk Recruitment

Recruitment through Amazon's MTURK required multiple steps, which are described in more detail in the paragraphs below. First, an initial screening survey was created (adapted from Lynn & Morgan's [2016] suggestions for recruiting veterans on MTURK) in order to determine eligibility for the full study. Second, if deemed eligible, based on their responses to the screener, participants were given a qualification code in MTURK. Third, only those with the designated qualification code could see and access the full study posted on MTURK. Finally, participants were compensated $0.01 for

completion of the screener and an additional $2 for completion of the full study. Informed consent was obtained for the screening survey and again for the full study. At each stage (screener or full study), participants were made aware of the following before choosing to participate: the eligibility requirements, amount of compensation, requirements needed for work to be approved and compensation awarded, and the risks related to rejected work in MTURK. Additionally, participants were prompted in the survey with recommendations to withdraw their participation and not submit their work if they failed an attention check item so as to avoid their work being rejected in MTURK. Participation in the screening survey and full study was entirely voluntary and participants were able to end their participation at any time without consequence.

Screening questions were designed to be difficult for non-veterans to answer in a short period of time (< 5 minutes) while actual veterans, of any branch, should be able to respond accurately and quickly. Additional questions to determine their student status (e.g. student or non-student) were included. Items were included, in both the screening survey and full study, to check the participant's attention to the task in an effort to limit, or at least identify, possible responding from digital bots. At the end of the survey and the full study, a randomized code was generated and presented. The participant was instructed to copy and paste the code into MTURK when they submitted their work for approval and payment so that their responses could be verified. If participants did not fail an attention check item, if they answered every item (regardless of accuracy), if they entered their MTURK ID when prompted, and if they entered a valid code, their work was approved and they were compensated ($0.01 for the screener and an additional $2.00 for the full study). The compensation amounts were determined based on the difficulty of

the task, estimated length of completion time, and recommended MTURK wages (Amazon Mechanical Turk, 2017). We chose to pay a reduced amount of $0.01 for the screener in an attempt to limit the effort and time it would take for non-veterans to fake or look up the answers to the screening questions. In other words, non-veteran participants may ask themselves if the time and effort spent researching the answers or guessing would be worth it for a penny, whereas veterans would be able to complete the screener quickly and without much effort in order to take the full study for a larger compensation.

In a matter of days, hundreds of participants had responded to the initial screener (n = 440), most of which were non-eligible participants who failed one or more of the requirements needed for their work to be approved. Roughly 82 (18.6%) respondents followed instructions and qualified for work approval and compensation, only four of which were deemed to be full study eligible (e.g. to be a student and a military veteran/service member). Analytics from Survey Monkey found that participants took an average of 46 seconds to complete the Trial 1 screener. After careful consideration of wording and item logic in Survey Monkey and after consultation with other MTURK users and my dissertation chairperson, we paused data collection through MTURK, made changes to the screening survey wording and Survey Monkey logic then submitted a modification to IRB. Specific changes included bolding the eligibility requirements and including parts of the informed consent (related to accepting/rejecting work) in the advertised study details in MTURK. Additionally, logic sequences in survey monkey were fixed such that ineligible participants were routed to the disqualification page and answer selections were clear once randomization of choices were removed. Once

approved by IRB, we started Trial 2 of the screening survey. Fewer total participants responded (n = 221), but the results collected were more fruitful compared to Trial 1. More responses appeared to be legitimate attempts at taking the survey, with roughly the same percentage (n = 44, 19.9%) qualifying for work approval and compensation, and a greater number of participants were deemed eligible to take the full study (n = 20). According to Survey Monkey, participants took an average of 92 seconds to complete the Trial 2 screener. Of the roughly 24 participants invited to take the full study, eight attempted the study, of which six were included in the final sample. Two were discarded due to failed attention check items. On average, it took about 8 minutes for participants to complete the full study.

CHAPTER IV

RESULTS

Before analyses were conducted, the final collected data were cleaned and screened. IBM SPSS Statistical Software version 26 was used for all data cleaning and analyses. The data were analyzed for important assumptions inherent to regression analyses, including normality and multicollinearity. The significance levels of $\alpha = .05$ were used in determining whether to reject the null hypothesis or not.

Descriptive Statistics and Reliability of Measures

Descriptive statistics and frequencies were run for all demographic variables then screened for missing data and participant size. A number of the demographic variables were condensed into fewer categories due to low sample size. For example, "Race/Ethnicity" had too few participants in categories other than "White." Therefore, all races other than White were condensed into a singular "non-White" category, thereby making Race/Ethnicity a dichotomous variable (White or non-White). Income level was another variable that required re-categorization. Ultimately, three levels, lower, middle, and upper income, were identified instead of the original six categories. However, with "Sexual Orientation," no re-categorization could be made. Even a combination of multiple categories would have resulted in a sample size still less than 10 per category,

which would be too few to use for any meaningful analysis. The re-categorized variable descriptions are summarized in Table 1.

Table 1

Sociodemographic Characteristics of Participants, Re-categorized

Demographics	University (*n* = 117)		MTURK (*n* = 6)		Full Sample (*n* = 123)	
	N	%	*n*	%	*N*	%
Age						
18-24	31	26.5	1	16.7	32	36
25-34	50	42.7	0	0	50	40.7
35+	36	30.8	5	83.3	41	33.3
Gender						
Man	83	70.9	4	66.7	87	70.7
Woman	34	29.1	2	33.3	36	29.3
Race						
White	98	83.8	4	66.7	102	82.9
Non-white	19	16.2	2	33.3	21	17.1
Sexual Orientation						
Heterosexual	111	94.9	6	100	117	95.1
Gay/Lesbian	4	3.4	0	0	4	3.3
Bisexual/Pansexual	1	.9	0	0	1	0.8
Other (“fluid”)	1	.9	0	0	1	0.8
Degree						
Undergraduate	74	63.2	2	33.3	76	61.8
Graduate/Law	43	36.8	4	66.7	47	38.2
Employment						
Full-time	33	28.2	3	50.0	36	29.3
Part-time	36	30.8	3	50.0	39	31.7
Unemployed	13	11.1	0	0	13	10.6
No answer	35	29.5	0	0	35	28.5
Enrollment						
Full-time student	75	64.1	1	16.7	76	61.8
Part-time student	11	9.4	1	16.7	12	9.8
No answer	31	26.5	4	66.7	35	28.5
Relationship Status						
Single	45	38.5	1	16.7	46	37.4
Not single	72	61.5	5	83.3	77	62.6
Children						
Yes	44	37.6	5	83.3	49	39.8
No	73	62.4	1	16.7	74	60.2
Income						
Lower (under $15k)	36	30.8	0	0	36	29.3
Middle ($15-$70k)	52	44.4	4	66.7	56	45.5
Upper (over $70k)	23	19.7	2	33.3	25	20.3
No answer	6	5.1	0	0	6	4.9
Military Affiliation						
Veteran	82	70.1	5	83.3	87	70.7
National Guard/Reserves	35	29.9	1	16.7	36	29.3
Branch						
Army	34	29.1	2	33.3	36	29.3
Air Force	23	19.7	3	50.0	26	21.1
Navy	18	15.4	0	0	18	14.6
Marine Corps	22	18.8	0	0	22	17.9
NG/R	18	15.4	1	16.7	19	15.4
No answer	2	1.7	0	0	2	1.6

Demographics	University (*n* = 117)		MTURK (*n* = 6)		Full Sample (*n* = 123)	
	N	%	*n*	%	*N*	%
Time Since Service						
Still Serving	39	33.3	1	16.7	40	32.5
1 year	14	12.0	1	16.7	15	12.2
2-5 years	35	29.9	1	16.7	36	29.3
6-10 years	16	13.7	2	33.3	18	14.6
11+ years	13	11.1	1	16.7	14	11.4
Highest Rank						
Enlisted	48	41.0	2	33.3	50	40.7
NCO	52	44.4	3	50.0	55	44.7
Officer	17	14.5	1	16.7	18	14.6
Combat Exposure						
Yes	40	34.2	5	83.3	45	36.6
No	77	65.8	1	16.7	78	63.4

Note. Participants on average had a Grade Point Average of 3.47 (*SD* = .57).

Given the low incidence of missing data (i.e., none missing for PHQ and GAD, one missing for each the PCL-5 and the CD-RISC, and two missing for the VAC), those participants were excluded from analyses that included those scales as the total sample size was only marginally impacted. This approach, though allowing perhaps for greater confidence in the results, is a potential limitation of the study. Mean substitution (Parent, 2013) would have produced an estimation of scores while retaining sample size. The means and standard deviations as well as the reliability coefficients for all the scales are provided (see Table 2). The Pearson *r* correlations between all scales ranged from -.27 to .74. Additionally, correlations among demographic and scale variables were performed to assess for possible significant relationships between variables (see Table 3). The items found to be significantly correlated with the outcome variables were then entered as covariates later during the hypothesis testing analyses. Chi-square analyses were performed to assess correlations between dichotomous variables and categorical variables with more than two levels. One-way ANOVAs were performed to assess correlations between continuous variables and categorical variables with more than two levels. A Pearson *r* correlation matrix was calculated to assess correlations between continuous and dichotomous variables (see Table 3).

Table 2

Psychometric Properties of Measures

Scale	*N*	*M*	*SD*	Range	Cronbach's α
Patient Health Questionnaire	123	6.64	5.61	0-25	.88
Generalized Anxiety Disorder Scale	123	6.51	5.53	0-21	.92
Posttraumatic Stress Symptom Checklist for DSM 5[a]	122	20.20	18.24	0-76	.96
Veteran Adjustment to College Scale	121	42.36	6.80	23-58	.77
Connor-Davidson Resilience Scale	122	30.47	5.47	16-40	.87

Note. Higher scores on the Patient Health Questionnaire, the Generalized Anxiety Disorder Scale, and the Posttraumatic Stress Symptom Checklist for DSM 5 indicate greater severity of symptoms for depression, anxiety, and PTSD, respectively. Higher scores on the Veteran Adjustment to College Scale indicate better adjustment to college. Higher scores on the Connor Davidson Resilience Scale indicate higher levels of resilience.

[a] Refers to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.).

Table 3

Descriptive Statistics and Correlations for Study Variables

Variable	*n*	1	2	3	4	5	6	7	8	9	10	11
1. PHQ scale	123	-										
2. GAD scale	123	0.72**	-									
3. PCL scale	122	0.69**	0.74**	-								
4. VAC scale	121	-.42**	-.42**	-.44**	-							
5. CD-RISC scale	122	-.30**	-.27**	-.28**	0.33**	-						
6. GPA	121	-.20*	-.09	-.22*	0.19*	0.18	-					
7. MTURK[a]	123	-.05	-.06	0.06	-.07	-.03	-.14	-				
8. Degree[b]	123	0.18*	0.16	0.20*	-.25**	-.23*	-.30**	-.13	-			
9. Enrollment[c]	88	0.05	0.02	-.08	-.10	0.10	0.08	-.16	0.13	-		
10. Military Affiliation[d]	123	0.26**	0.28**	0.29**	-.06	-.03	0.22*	0.06	-.07	0.10	-	
11. Gender[e]	123	0.07	0.08	0.19*	-.09	-.07	-.16	-.02	-.03	-.01	025**	-
12. Race/Ethnicity[f]	123	-.01	-.00	-.03	-.00	-.15	-.11	-.10	0.18	-.10	-.10	0.04
13. Relationship[g]	123	0.04	0.18*	0.09	-.02	0.10	0.32**	-.10	-.33**	-.13	0.24**	-.09
14. Children[h]	123	0.09	0.08	0.20*	-.01	-.00	0.08	-.20*	-.25**	-.05	0.23**	-.02
15. Combat Exposure[i]	123	0.15	0.22*	0.26**	-.08	0.07	0.21*	0.22*	-.34**	-.10	0.23*	0.12

Variable	12	13	14	15
1. PHQ scale				
2. GAD scale				
3. PCL scale				
4. VAC scale				
5. CD-RISC scale				
6. GPA				
7. MTURK				
8. Degree				
9. Enrollment				
10. Military Affiliation				
11. Gender				
12. Race/Ethnicity	-			
13. Relationship	-.04	-		
14. Children	-.12	0.42**	-	
15. Combat Exposure	-.28**	0.73**	0.28**	-

[a] MTURK is coded as 0 = not MTURK participant and 1 = yes, MTURK participant.

[b] Degree is coded as 0 = graduate/law student and 1 = undergraduate student.

[c] Enrollment is coded as 0 = part-time student and 1 = full-time student.

[d] Military Affiliation is coded as 0 = National Guard/Reserves and 1 = Veteran.

[e] Gender is coded as 0 = woman and 1 = man.

[f] Race/Ethnicity is coded as 0 = non-White and 1 = White.

[g] Relationship Status is coded as 0 = single and 1 = not single.

[h] Children is coded as 0 = no kids and 1 = has kids, including stepchildren.

[i] Combat Exposure is coded as 0 = none and 1 = has combat exposure.

*$p < .05$. **$p < .01$.

Other assumptions of regression analysis were explored. Specifically, normality of the dependent variables was assessed through examination of histograms, skewness and kurtosis ranges; all fell within acceptable ranges for skew (between + or – |2|) and kurtosis (between + or – |7|). Homogeneity of variance was assessed for all categorical variables, whether significantly related to the dependent variables or not. All fell within acceptable ranges except two. Levene's statistic was significant for resilience and degree type ($p = 0.03$), and resilience and age ($p = 0.05$). Only degree type was shown previously to be significantly correlated with the outcome variable (i.e. resilience). Each degree group varied in size (undergraduate $n = 76$ and graduate/law $n = 47$), and they had different variances (undergraduate $s^2 = 24.66$ and graduate/law $s^2 = 34.95$). Likewise for age, each group varied in size (18-24 $n = 32$, 25-34 $n = 50$, and 35+ $n = 41$) and had different variances (18-24 $s^2 = 21.60$, 25-34 $s^2 = 40.92$, and 35+ $s^2 = 22.86$). The violation of the assumption of homogeneity for degree type suggests a greater likelihood of making a Type I error while the violation for age suggests a possibility of making a Type II error. However, few options are available to correct for this and is noted as a potential limitation of this study. Finally, the study variables were assessed for outliers using the Mahalanobis outlier statistic. No outliers were found.

Data Analyses

Hypotheses 1-3

A series of three multiple regressions were run to explore whether mental health factors (i.e., PTSD [H1], depression [H2], and anxiety [H 3]), predicted SSM/V resilience. In this analysis, the goal is to show whether a set of predictor variables are related to a singular outcome variable (Gelman & Hill, 2007). Total scores on three

scales, each assessing one of the mental health factors (i.e. the PCL-5 for PTSD, the PHQ-9 for depression, and the GAD-7 for generalized anxiety), were used to predict resilience, as measured by a total score on the CD-RISC-10 item scale. All predictors were included based on prior theory and findings, consistent with other research on these constructs, as described in the Chapters 1 and 2. The following variables were included as covariates in model 1, given their significant correlation to the outcome variable (resilience): highest rank (dummy coded with enlisted rank held constant and NCO and officer rank included in model) and degree type (coded as 1 = undergraduate and 0 = graduate/law degree). In model 2 for each regression, the mental health factor, either PTSD, depression, or anxiety, was added as a predictor (see Tables 4-6). As can be seen in the tables, each measure of mental health negatively and significantly predicted one's resilience such that higher levels of mental health concerns (as measured by higher scores on each of the measures, PCL-5, PHQ-9, and GAD-7) predicted lower levels of resilience (as measured by lower scores on the CD-RISC-10). Hypothesis 1 was supported, such that PTSD predicted resilience, $F(4, 116) = 4.18$, $p = .00$, with an R^2 of .13, indicating that roughly 13% of the variance found in levels of resilience is related to PTSD symptoms. Support was also found for my second hypothesis, such that depression predicted resilience, $F(4, 117) = 4.49$, $p = .00$, with an R^2 of .13, indicating that 13% of the variance in resilience can be related to depression. Finally, my third hypothesis was also supported. Anxiety predicted resilience, $F(4, 117) = 4.12$, $p = .00$, with an R^2 of .12, indicating that roughly 12% of the variance in resilience can be explained by anxiety.

When all three mental health factors were included in a single regression together (added in model 2), the overall model was found to be significant ($p = .00$), however, no

individual factor was found to be a significant predictor. This is likely due to the significant correlation found between each factor: PTSD and depression (r = 0.69), depression and anxiety (r = 0.72), and anxiety and PTSD (r = 0.74). The factors were found to be so intercorrelated in this study, they were likely indistinguishable from one another statistically and therefore did not reach significance above and beyond the predictive power of the other factors while included in the same model. While conceptually, these mental health factors perhaps capture distinct mental health syndromes, it evident statistically that they appear to at least capture mental health distress more generally. As such, entering each factor individually in separate regressions helped to demonstrate clarity in their contributions to predicting resilience.

Table 4

Regression Coefficients of PTSD on Resilience

Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.07*	
Constant	32.11**	29.55	34.67	1.29			
Degree	-1.51	-3.79	0.77	1.15	-.14		
Rank (NCO)	0.99	-1.12	3.11	1.07	0.09		
Rank (Officer)	1.76	-1.60	5.11	1.70	0.12		
Model 2						0.13**	0.05**
PTSD	-.08**	-.13	-.02	0.03	-.24**		

Note. B = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; NCO = non-commissioned officer. All numbers listed represent model 2 findings, except for R^2, which represents the models under which it is listed.

* $p < .05$, ** $p < .01$.

Table 5

Regression Coefficients of Depression on Resilience

Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.07*	
Constant	32.36**	29.74	34.99	1.33			
Degree	-1.48	-3.74	0.78	1.14	-.13		
Rank (NCO)	1.32	-.79	3.43	1.06	0.12		
Rank (Officer)	1.46	-1.93	4.85	1.71	0.10		
Model 2						0.13**	0.07**
Depression	-.28**	-.46	-.09	0.09	-.27**		

Note. B = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; NCO = non-commissioned officer. All numbers listed represent model 2 findings, except for R^2, which represents the models under which it is listed.

* $p < .05$, ** $p < .01$.

Table 6

Regression Coefficients of Anxiety on Resilience

Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.07*	
Constant	32.13**	29.55	34.80	1.32			
Degree	-1.54	-3.81	0.73	1.25	-.14		
Rank (NCO)	1.37	-.76	3.50	1.07	0.13		
Rank (Officer)	1.62	-1.78	5.02	1.72	0.12		
Model 2						0.12**	0.06**
Anxiety	-.25**	-.43	-.07	0.09	-.25**		

Note. B = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; NCO = non-commissioned officer. All numbers listed represent model 2 findings, except for R^2, which represents the models under which it is listed.

* $p < .05$, ** $p < .01$.

Hypothesis 4

To test whether resilience (as measured by the CD-RISC-10) predicts college adjustment (as measured by the VAC) for SSM/Vs, a multiple regression was conducted. The following variables were included as covariates in model 1, given their significant correlation to the outcome variable (college adjustment): highest rank (dummy coded with enlisted rank held constant and NCO and officer rank included in model), branch of service (dummy coded with "NG/R" held constant and Army, Air Force, Marine Corps, and Navy included in the model), GPA, and degree type (coded as 1 = undergraduate and 0 = graduate/law degree). In model 2, resilience was added as a predictor. Table 7 summarizes the descriptive statistics and results of the analysis. As can be seen, Hypothesis 5 was supported. A significant regression equation was found, $F(9, 108) = 3.45$, $p = .01$ with an R^2 of 0.22, indicating that roughly 22% of the variance found in levels of college adjustment is related to resilience.

Table 7

Regression Coefficients of Resilience on College Adjustment

Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.17**	
Constant	30.65**	19.20	42.11	5.78			
GPA	1.47	-1.29	4.23	1.39	0.10		
Degree	-1.18	-4.07	1.70	1.46	-.09		
Branch (Army)	-.42	-4.16	3.31	1.88	-.03		
Branch (AF)	-1.30	-4.99	2.41	1.87	-.08		
Branch (Navy)	-3.06	-7.32	1.21	2.15	-.16		
Branch (MC)	-4.90*	-8.98	-.82	2.06	-.28*		
Rank (NCO)	-.96	-3.78	1.87	1.43	-.07		
Rank (Officer)	0.28	-4.10	4.65	2.21	0.02		
Model 2						0.22**	0.06**
Resilience	0.31**	0.09	0.53	0.11	0.25**		

Note. *B* = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; AF = Air Force; MC = Marine Corps; NCO = non-commissioned officer. All numbers listed represent model 2 findings, except for R^2, which represents the models under which it is listed.

*$p < .05$, **$p < .01$.

Hypothesis 5

Multiple regression mediation analysis was run to explore the relationship between mental health predictors and college adjustment when mediated by resilience. Mediation analysis is used to help explain a relationship between predictor and outcome variables (Frazier, Tix, & Barron, 2004) and is used to explore the effect of the predictor variable(s) (i.e. mental health) on the outcome variable (i.e. college adjustment) when impacted by the value of another predictor (i.e. resilience) (Gelman & Hill, 2007). PROCESS v3.4 software, by Dr. Andrew Hayes, was downloaded as an SPSS add on macro in order to run the analyses. Three separate mediation analyses were run, one for each of the three mental health predictors: PTSD, depression, and anxiety. According to the more modern model of analyzing mediation put forth by Hayes (2009), it is not necessary to estimate or establish a relationship between each path of the model (e.g. between the predictor and mediator variables, the mediator and outcome variables, and the predictor and outcome variables) in order to assess mediation. Rather than the causal steps approach, put forth by Baron and Kenny (1986), Hayes argues for the use of bootstrapping. This technique repeatedly resamples (he recommends 5000 times) the original participant sample, with replacement method, in order to infer the size of the indirect effects on the population sampled, yielding a percentile-based confidence interval (Hayes, 2009). If zero is not between the upper and lower confidence interval bounds, one can conceptually reject the null hypothesis and conclude significance of the model (Hayes, 2009). Support for my hypothesis that resilience mediates the relationship between mental health concerns and college adjustment was supported, as can be seen in Table 8. A confidence interval of 95% was originally tested, with results approaching

significance for each model; however, given the directional prediction of the hypotheses (i.e. greater resilience will predict better college adjustment), the analyses were re-run at 90% confidence interval. Statistically, this allowed for greater power to detect an effect in a particular direction and significance was found.

Table 8

Mediation Analysis: Resilience and Relationship between Mental Health and College Adjustment

Variables	B	*SE*	90% CI		*p*
			LL	*UL*	
Direct effects					
PTSD	-.11**	0.037	-.174	-.052	0.003**
Depression	-.35**	0.121	-.549	-.149	0.005**
Anxiety	-.39**	0.115	-.582	-.202	0.001**
Indirect effects					
PTSD	-.02*	0.012	-.039	-.000	
Depression	-.06*	0.040	-.134	-.005	
Anxiety	-.05*	0.040	-.133	-.005	

Note. The direct effects represent the effect of the predictor (e.g. PTSD) on adjustment. The indirect effects represent the effect of the mediator (resilience) on the relationship between the mental health predictor and the outcome (college adjustment).

*$p < .05$, **$p < .01$

Hypotheses 6 and 7

Two dichotomous, categorical variables were included as moderators of the relationship between resilience and college adjustment for SSM/Vs: military affiliation status (whether a veteran or a National Guard/Reserves member) and combat exposure (yes or no). A series of two hierarchical multiple regressions were run to explore whether the relationship between resilience and college adjustment was moderated by military affiliation status (coded as 1 = veteran and 0 = NG/R) and whether or not an SSM/V endorsed having combat exposure (coded as 1 = yes and 0 = no). Moderation analysis is used to assess whether a particular variable changes the strength or direction of a relationship between the predictor and outcome variable (Frazier, Tix, & Barron, 2004). Based on prior research and theory, differential outcomes on adjustment were expected depending on whether an SSM/V was a former full-time active duty veteran or a national guard/reserve member. The following variables were included as covariates in model 1 for each regression, given their significant correlation to the outcome variable (college adjustment): highest rank (dummy coded with enlisted rank held constant and NCO and officer rank included in model), branch of service (dummy coded with "NG/R" held constant and Army, Air Force, Marine Corps, and Navy included in the model), GPA, and degree type (coded as 1 = undergraduate and 0 = graduate/law degree). In model 2, resilience and the moderator variable were added as predictors (e.g. military affiliation status in regression one and combat exposure status in regression two). In model 3, for both regressions, an interaction term was created between the predictor (resilience) and the moderator (e.g. resilienceXmilitaryaffiliation and resilienceXcombat) and added as a predictor. Support was partially found for these

hypotheses. As can be seen in Table 9, combat exposure was not found to significantly moderate the relationship between resilience and college adjustment (hypothesis 7), nor was a significant main effect found for combat exposure on college adjustment. Of note, the overall model was significant (p = .00), but further examination of the output demonstrated lack of significance for combat exposure.

The interaction effect of military affiliation status and resilience, however, was significant. Military affiliation status was negatively and significantly (p = .00) shown to moderate the relationship between resilience and college adjustment (hypothesis 6), which can be seen in Table 10. Figure 2 shows that the impact of resilience on college adjustment is more pronounced in NG/R members as compared to veterans. A simple slopes analysis was conducted to better understand this outcome. The regressions were re-run by first only including veterans in the analysis and then by only including NG/Rs in the analysis. Results showed that the only significant relationship between resilience and college adjustment was found for NG/R members (p = .01, B = .49) and not for veterans (p = .21, B = .17).

Table 9

Moderation Analysis: Combat Exposure and College Adjustment

Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.17**	
Constant	32.83**	20.60	45.06	6.17			
GPA	1.65	-1.10	4.41	1.39	0.12		
Degree	-1.75	-4.72	1.22	1.50	-.13		
Branch (Army)	0.027	-3.74	3.79	1.90	0.00		
Branch (AF)	-.94	-4.65	2.77	1.87	-.06		
Branch (Navy)	-2.98	-7.22	1.26	2.14	-.16		
Branch (MC)	-4.45*	-8.55	-.34	2.07	-.25*		
Rank (NCO)	-.35	-3.25	2.56	1.46	-.03		
Rank (Officer)	0.42	-3.94	4.78	2.20	0.02		
Model 2						0.24**	0.07**
Combat	-8.28	-22.01	5.44	6.92	-.59		
Resilience	0.24	-.034	0.51	0.14	0.19		
Model 3						0.25	0.01
ResXcom	0.20	-.24	0.64	0.22	0.46		

Note. *B* = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; AF = Air Force; MC = Marine Corps; NCO = non-commissioned officer. ResXcom refers to the interaction term created for resilience and the combat exposure moderator. All numbers listed represent model 3 findings, except for R^2, which represents the models under which it is listed.

*$p < .05$, **$p < .01$.

Table 10

Moderation Analysis: Military Affiliation and College Adjustment

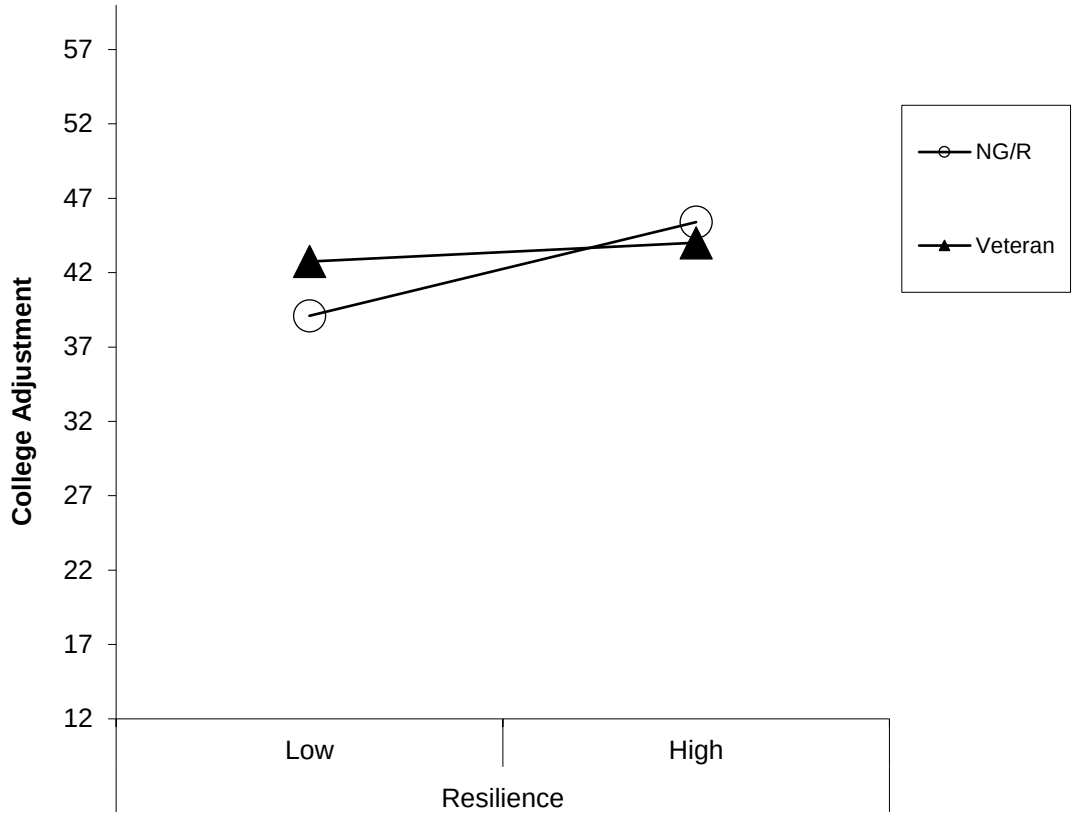
Variable	*B*	95% CI for *B*		*SE B*	*β*	R^2	ΔR^2
		LL	*UL*				
Model 1						0.17**	
Constant	20.66**	5.74	35.58	7.52			
GPA	0.91	-1.87	3.69	1.40	0.06		
Degree	-1.16	-4.02	1.70	1.44	-.08		
Branch (Army)	-.99	-5.03	3.04	2.04	-.07		
Branch (AF)	-2.37	-6.38	1.65	2.03	-.15		
Branch (Navy)	-3.79	-8.49	0.91	2.37	-.20		
Branch (MC)	-5.87**	-10.42	-1.33	2.29	-.33**		
Rank (NCO)	-1.05	-3.86	1.75	1.42	-.08		
Rank (Officer)	0.33	-3.99	4.65	2.18	.02		
Model 2						0.23*	0.06*
Military Affiliation	16.51*	1.03	31.99	7.81	1.11*		
Resilience	0.70**	0.27	1.13	0.22	0.56**		
Model 3						0.26*	0.03*
ResXmil	-.50*	-.99	-.01	0.25	-1.09*		

Note. B = unstandardized; CI = confidence interval; LL = lower limit; UL = upper limit; *SE* = standard error; β = standardized; AF = Air Force; MC = Marine Corps; NCO = non-commissioned officer. ResXmil refers to the interaction term created for resilience and the military affiliation moderator. All numbers listed represent model 3 findings, except for R^2, which represents the models under which it is listed.

*$p < .05$, **$p < .01$.

Figure 2

Moderation Analysis: Military Affiliation and College Adjustment



Note. This figure demonstrates the moderation effect of military affiliation status on the relationship between resilience and college adjustment. The lower bound represents one standard deviation (SD) below the mean of resilience while the upper bound represents one SD above the mean. NG/R = National Guard/Reserve members (coded as 0). Veteran is coded as 1. Outcome variable = college adjustment. Predictor = resilience. Moderator = military affiliation (e.g. NG/R vs. Veteran).

CHAPTER V

DISCUSSION

This study explored the effect of resilience on college adjustment for student service members/veterans. The guiding approach for this study was embedded in a positive psychology framework, with the intent to highlight strengths of the SSM/V population. This approach served to purposefully add another side of the conversation to an already limited and pathologizing literature about veterans in higher education. The sample in this study was comprised of volunteer participants recruited from two sources: Amazon's MTURK and from 10 universities across the United States. Participants were 18 years of age or older and identified as both former or current military service members and college students. In this chapter, I will discuss the findings in more detail, with regards to their meaning and their significance as it pertains to the greater body of literature on resilience and college adjustment. I will proffer applications for clinical practice and college/academic reforms and programming. Limitations, as well as the strengths of this study will be discussed, as will implications for future research on this topic.

Overview

This study assessed the impact of resilience on college adjustment for student service members/veterans (SSM/V) from a number of perspectives. Specifically, it explored the relationship between resilience and three existing mental health factors: posttraumatic stress disorder (PTSD), depression, and anxiety. Support was found for the hypotheses that there will be a negative correlation between mental health factors and resilience. More specifically, results found that lower levels of mental health distress were predictive of better resilience. These findings are consistent with an existing body of literature on the matter which shows that greater concerns with mental health issues, such as PTSD, depression, and anxiety, are indicative of lower levels of resilience or the ability to "bounce back" from stress, trauma, or adversity (e.g. Hu et al., 2015; Smith et al., 2016).

Moreover, the fourth hypothesis, in which it was postulated that higher levels of resilience would be predictive of better college adjustment, was also supported. Results suggest that those individuals who are more resilient tend to transition more effectively to academic life and demands as compared to SSM/Vs who are less resilient. This finding is also consistent with the limited research on the topic which finds that it is not the trauma or severity of mental health symptoms that predict adjustment, but rather how one copes with and responds to those stressors or challenges (e.g. Hartley, 2012).

This study also explored whether resilience mediates the relationship between college adjustment and the three mental health factors (PTSD, depression, and anxiety). Results found that an increase in a mental health concern predicts poorer college adjustment and that resilience helps to explain that relationship. In other words, this suggests resilience helps to explain the relationship between mental health concerns and

college adjustment for SSM/Vs. It could be that because lower resilience is correlated with increased mental health concerns, bolstering one's resilience, even in the context of MH diagnoses, could predict college adjustment. This finding is a unique contribution to the literature. To the best of this researcher's knowledge, this is the first study that has specifically looked at these three factors (mental health, resilience, and college adjustment) in this population (SSM/Vs).

This study also explored whether resilience predicts college adjustment differently for veterans versus National Guard/Reserve (NG/R) members and for those who had been exposed to combat or not. Another unique contribution of this study to the broader literature is found, in fact, in the one hypothesis that was not supported. Specifically, the hypothesis that the relationship between resilience and college adjustment would differ between SSM/Vs with combat exposure and those without was not supported. Though this has not been thoroughly studied in the literature, the finding contradicts other research which demonstrates higher rates of PTSD in combat exposed military affiliated students as compared to non-combat exposed (Blackburn & Owens, 2016; Elliott et al., 2011) and other research that has found resilience to be an important protective factor in combat exposed veterans (Green et al., 2010). In other words, the literature suggests a difference in mental health and adjustment for combat versus non-combat military affiliated persons, but in this study, such a difference was not found. There are a couple potential reasons for this finding. First, the relatively small sample size and the disproportionate size of the combat vs. non-combat exposed SSM/Vs could have limited the power to detect differences between these subgroups. Second, it is possible that one's response to trauma (i.e. resilience), matters more as it pertains to

adjustment regardless of whether that trauma was combat related or not. In other words, if a SSM/V experienced combat, but was highly resilient and did not develop significant mental health distress pertaining to the combat trauma, their adjustment to college should be good. On the other hand, if a SSM/V experienced trauma, combat related or not, and was perhaps less resilient, it could be expected that their college adjustment would be poorer. To put more plainly, the type of trauma may not matter, at least not as much as the level of one's resilience following the trauma does.

Support was found, however, for the hypothesis that military affiliation status (i.e. NG/R vs Veteran) would moderate the relationship between resilience and college adjustment. This finding corroborates a broader literature that has routinely found differential outcomes for these two groups (e.g. Blackburn & Owens, 2016; Bonar, 2016; Elliott et al., 2011; Molina & Morse, 2017). In fact, the findings show that resilience is more impactful for NG/R as compared to veterans. There are a few potential explanations for this. National Guard/reserve students tend to be younger than veteran students which could suggest, as others have (e.g. Hu et al., 2015) an age component to resilience. More specifically, some suggest that we become more resilient as we age which could explain why resilience has a more pronounced effect on younger, NG/R students. However, when the moderation analysis was re-run with age included as a covariate, results from this sample showed that the interaction of resilience and military affiliation status was no longer significant (p = .06), yet the main effect of military affiliation status was significant. Moreover, age was not found to be a significant predictor in the model. This might suggest that age is not the cause of the differential effect of resilience on veterans versus NG/Rs, but rather some other factor that was not captured in this analysis may be

confounding the results. Another possible explanation for the differential effect could be found through a more nuanced understanding of resilience. Some of the differential outcomes in NG/R members versus veterans are attributed to different access to resources, supports, and peer networks. NG/R individuals don't tend to reside on or near a military installations which can limit access to peers and fellow service members and access to benefits/resources found on bases (e.g., health and wellness services), they spend the majority of their days functioning as civilians with civilian jobs or attending school, and experience more frequent disruptions to their lives when called for training weekends or deployments. Therefore, greater trait resilience factors could be more important for these individuals rather than a more interactional or process approach of resilience, such as the roles that social support and environment have. To put another way, perhaps specific components of resilience are underlying this finding such that more nuanced exploration is needed in order to better understand why resilience is more pronounced for NG/Rs versus veterans.

Implications for Practice

The findings of this study point to a number of potentially important practice and policy considerations. Resilience was found to be an important factor in predicting college adjustment for SSM/Vs which suggests that increased programming to target resilience skill building should be incorporated into the college experience for this population. For example, talks on resilience and important skills/predictors of successful adjustment could be outlined at college orientation seminars. Some universities include a mandatory first-year "Intro to College" course. This course could aim to incorporate modules specifically geared toward developing resilience in students in addition to

highlighting campus resources and avenues for socialization. Effectiveness in building resilience skills have already begun to be established with college students through programs such as the Humanity and Resilience Project (Sibley et al., 2019) and the Resilience and Coping Intervention program (Houston et al., 2017). The results found in this study show that resilience helps to explain the relationship between MH concerns and college adjustment. This suggests, that even with those SSM/Vs experiencing MH concerns, bolstering resiliency skills could have a positive impact on their college adjustment. Additionally, the military has been exploring ways to build resilience in their service members and families for years through the Families Overcoming Under Stress (FOCUS) program (Lester et al., 2011), the Warrior Resilience Training program (Jarrett, 2008) and the Comprehensive Soldier Fitness program (Casey, 2011). Research continues to show various positive outcomes for individuals with greater resilience and we see that resiliency skills can be taught and developed. In drawing from examples already in place, such as those just listed, we can apply the findings found in this study and others and improve the college adjustment of SSM/Vs by helping them build resilience.

Moreover, universities may wish to strongly consider SSM/V specific programming versus generalized trainings/orientation. Population specific approaches serve to validate the unique identity and needs of the group (Osborne, 2016) while allowing adequate time for discussing relevant information. For example, the increasing number of SSM/Vs who utilize G.I. Bill benefits to fund college would likely benefit from incorporation of this information by the university's VA benefits certifying official into orientation seminars rather than being exposed to lengthy discussions of funding sources that are less utilized by this population. Many veteran students find it difficult to

navigate the bureaucracy of higher education and need assistance in applying for benefits and potentially transferring military credits towards their academic degree (Ackerman et al, 2009). In fact, in my own experience working as a program coordinator in a university veteran student resource center, many veterans report they do not attend orientation purely because they feel it won't be relevant to their needs or experiences. While there is likely room for improvement with regards to targeted population-specific information, there is still a wealth of other important information these veterans miss by not attending orientation. Small changes to programming could yield significant benefits for SSM/Vs and their college experience. I believe it is important to recognize the experience and resilience this population brings with them to college. Tailoring the treatment of these veterans from their first contacts with the university will send the message to them that the university understands who they are, their needs, and recognizes they are adults, who have potentially already had careers, families, and perhaps serious life events beyond those potentially experienced by the average first year college student. This show of respect would likely serve to help SSM/Vs feel more welcomed on college campuses and will help to create a culture across the university that promotes the strengths of this population and reinforces the message that their needs and opinions are just as valued as their civilian freshman counterparts.

Another important consideration for universities is the creation and implementation of veteran resource centers on campus. SSM/Vs have made clear that "veteran friendly campuses" would make a significant, positive impact on their lives and academic success (Ackerman et al., 2009). One such way to create a veteran friendly campus is to ensure development of a veteran resource center on campus. These centers

serve a number of purposes. First, they create a safe space where SSM/Vs can socialize with others who have military experience. Some spaces can include a lounge/relaxation space, a quiet study space, basic kitchen amenities (e.g microwave, refrigerator), and offices where guidance counselors can discuss financial, academic, mental health, or employment needs with students This is important for developing strong social connections and creating a sense of belonging on campus as well as increasing access to resources. Second, these centers generate SSM/V-specific resources and access to assistance throughout the college experience. Of course, utilization of resources, such as the counseling center, writing center, and career center, could make a huge difference in the success of students. Knowing that other veterans utilize these services and/or that veterans can help provide these resources to other veterans on campus could likely reduce barriers and improve academic outcomes for this population (DiRamio, et al, 2008). Third, these centers can serve to provide important funding information and resources for veterans. Specifically, they tend to offer VA work study positions, host the VA benefits certifying official (which helps to secure G.I. Bill funding), host VSOC VA vocational rehabilitation advisors (VetSuccess on Campus), can include a VITAL (Veterans Integration to Academic Leadership) representative (Ahern et al, 2015), and can provide information on more typical college funding options, like financial aid, loans, assistantships, and campus employment. Fourth, these centers can offer veteran targeted programming, such as peer mentorship, peer tutoring, and service/leadership with veteran specific organizations, such as a chapter of the Student Veterans of America (SVA) student organization. An important value of military service is teamwork and the group effort towards mission completion. However, college can feel like a solo activity when

resources such as these centers are not made available. Veteran resource centers can serve to foster the team mentality by allowing a space for veterans to learn from and support one another; they can see that other people who are similar to them are also sharing this journey and, possibly, learning how to transition from a military career to a civilian one. These centers can help provide solidarity amongst veterans and can strengthen their resolve, increase accountability, and prevent issues before they become insurmountable or hinder retention or graduation (Ackerman et al., 2009; Ahern et al., 2015; DiRamio et al., 2008).

Finally, findings from this study point to the need for improved access to mental health resources for SSM/Vs. This populations comes to college with mental health concerns, just as civilian students do (Bonar, 2016; Cleveland et al., 2015); however, it is possible their mental health and/or adjustment concerns stem from military-related experiences and culture. Having college counselors/mental health professionals who are sufficiently trained to address the specific needs of this population is critical, given that there are military cultural considerations to account for and specific mental and physical conditions that impact the SSM/Vs college experience, such as PTSD and traumatic brain injuries (TBIs; Osborne, 2016; Schonfeld et al., 2015). In my own experience, many veterans have reported to me that they do not seek counseling services on college campuses due to their perception that the counselor won't be able to relate to or understand their needs and concerns. Instead, they choose to seek services at the VA Medical Center or community outpatient clinics. However, these sites can sometimes have lengthy waiting periods, too much time in between sessions, or be too costly for veterans. Counseling services on college campuses, which tend to be free of charge and

easily accessible between classes while the veteran is already on campus, go underutilized by this population, which could highlight the important roles of cultural competence of clinicians and perceived ability to address veteran-related (Albright et al., 2017). Counseling centers can do more to increase training of their staff to include military cultural competency training and specific intervention and assessment skills training specific to mental health diagnoses with SSM/Vs. For example, counseling centers couldcollaborate with the Center for Deployment Psychology to provide the Counseling Center Core Competency [UC4] training. They can further do more to outreach to veterans and promote their services across campus to this population. While some counseling centers create targeted services for LGBTQ+ populations, such as support groups, which promotes the visibility of counseling services as a safe place for that population, many centers could do more to expand targeted practices/services for other populations across campus, such as for SSM/Vs. They may wish to consider embedding providers or services, such as groups, within the veteran resource center to help increase access and decrease stigma that may be associated with the physical counseling center space.

Implications for Research

To the best of this researcher's knowledge, this is the first study to explore resilience, college adjustment, and mental health in the same study, thereby adding unique contributions to the literature. In fact, a solid contribution is with regards to sampling and geographic diversity of the participants. The incorporation of multiple universities from across the United States to recruit participants helps to establish the generalizability of these findings. Therefore, future research should seek to replicate and

extend the findings found in the study, and should attempt to explore these effects with a larger sample size and from an even greater number of universities. Additional analyses should seek to explore potential differences between university versus community college level SSM/Vs, full or part-time enrolled students, and graduate versus undergraduate students. Resources and access to them may differ based on those factors just listed which could impact college adjustment beyond veteran status or level of resilience alone.

Moreover, future studies should seek to compare these outcomes to civilian students. It would be beneficial to assess whether resilience and college adjustment differs across typically aged civilian college students, non-traditional aged students, and SSM/Vs. It is possible that age and life experience contribute to levels of resilience and college adjustment and future studies could point to differential outcomes and needs for each population. Some research suggest that military affiliated students more closely resemble non-traditional students (Bean & Metzner, 1985; Wyatt, 2011; Toynton, 2005); future research should seek to explore this assertion further to help identify the factors that best explain college adjustment.

It is recommended that future studies also explore more objective measures of adjustment or college success such as GPA, time to complete degree, retention and graduation rates, social involvement, professional leadership/service on campus, and utilization of campus resources, (e.g. counseling centers, career centers, writing centers, library resources, health and wellness services, etc.). The current study used a self-report measure of adjustment, but inclusion of measures with more validation evidence could highlight important considerations. For example, one's perception of adjustment may not necessarily match one's grades or graduation rates. It could be that one perceives

adjustment as comfortability with the college environment or perception of social support on campus versus their ability to successfully navigate coursework or achieve their desired grades, both of which they could be attributing to their intelligence rather than their adjustment. It is also recommended that future studies utilize a more established measure of college adjustment, rather than the measure used in this study, to explore any potential differences. It may be possible that a veteran specific adjustment scale is needed if differences are found between civilian and veteran students across different measures of college adjustment.

Limitations

This study had a number of limitations that should be considered. First, this study's correlational, quasi-experimental design limits that ability to draw causal inferences between the variables of interest. As such, it is always possible with this type of design that other, unaccounted for variables, contributed to the findings. Other causal pathways may be present that were not explored in this study. For example, though in this study, mental health concerns predicted resilience, it could be the relationship is reversed, whereby resilience predicts mental health concerns. Moreover, it is possible that mental health concerns instead mediate the relationship between resilience and college adjustment rather than resilience as the mediator. Additionally perhaps, there is another mechanism of action that better explains the relationship between mental health concerns and adjustment, such as social support. A longitudinal design, in which SSM/Vs are assessed before starting college, during their academic years, and following either their graduation or exit from higher education could help to establish a more solid understanding of the causal factors that contribute to successful adjustment, retention,

and graduation rates of this population. Additionally, a true experimental design, in which SSM/Vs are randomly assigned to a resilience skill building program or a control group, could help to shed light on the causal impact resilience may have on college adjustment.

A second limitation was the relatively low sample size when considering the nature of the analyses used. It is possible this contributed to reduced power and a greater likelihood of causing a Type II error (e.g. failing to reject the null hypothesis when the null hypothesis is false) where non-significance was found. Additionally, a larger sample size may have increased the diversity of the sample which would have allowed for more detailed comparisons across subgroups. Also, selection bias of the universities in which to recruit participants should also be considered. The choice of lists in which to select schools, as well as the decision criteria for deciding on which schools to outreach was a somewhat subjective process. This researcher drew, in part, on her professional experience and consultation with professional veteran and administrative networks to decide which schools would have greater likelihood of participation.

Another limitation was measurement and researcher error regarding the demographic questionnaire. After data collection, it was found that wording of questions were unclear which led to lack of precision and clarity in defining certain demographics. For example, age was asked for in ranges versus precise age in years. At times, these errors impacted sample size, as not all demographics were responded to by all participants. The lack of precision contributed to a loss of richness in the description of participants and diminished ability to assess differences across demographics and subgroups.

Finally, as was discussed previously, homogeneity of variance was violated for only two variables, degree type and age, with degree type being the only variable found to be previously significantly correlated with resilience. The violation of the assumption of homogeneity for degree type suggests a greater likelihood of making a Type I error while the violation of the assumption for age suggest a greater likelihood of having made a Type II error, in which age should have perhaps been included in the model as a covariate. However, few options were available to correct for this and it is likely this violation had a minimal impact on the study outcomes.

Despite these limitations, the study also had a number of strengths. First, there was very little missing data. This helped to preserve sample size and power across the analyses, increasing credibility of the findings. Second, the sample was regionally diverse, with representation across the United States. Finally, of the universities outreached to for recruitment, 50% participated. This relatively high response and participation rate, amidst a global pandemic, was significant and shocking, and perhaps further anecdotal evidence of both the resilience this population possesses and the recognition of the need for this type of study.

Summary

This study demonstrated the important role that resilience plays in positive college adjustment for SSM/Vs. The findings have added a strengths-based perspective to the literature on this population, which helps to provide balance to an overwhelmingly pathologizing literature. This, in turn, can help to reduce stigma and improve the lives of SSM/Vs on college campuses. The implications for practice highlight the critical need of creating veteran friendly campuses, whereby staff, faculty, and students alike develop

military cultural competency and veteran-specific programming and resources are made readily available to SSM/Vs.

When one considers that resilience is an interplay between intrapersonal and interpersonal factors, we cannot ignore the role the system plays in college adjustment outcomes for this population. To phrase it another way, perhaps instead of viewing the SSM/V as disordered or focusing efforts solely on their pathology, we should also be examining the aspects of the higher education system that fail them. In this way, the system can learn and adapt appropriately to more effectively understand, appreciate, and attend to the unique needs of this population. Moreover, college counseling centers can serve as critical stakeholders in fostering culture change and creating welcoming college environment for these students. Through increased SSM/V-targeted outreach efforts, resilience skill building programming, and improved military cultural competency training (for clinicians and college faculty/staff/students), the college campus can demonstrate actionable ways in which they support SSM/Vs. Relationships should be formed between veteran resource centers, college counseling centers, tutoring services, career services, disability services, financial aid offices and more in order to broaden shared efforts to address the needs of SSM/Vs and provide them with every opportunity to be successful in higher education.

These individuals were willing to pay the ultimate sacrifice in order to defend this country and the principles of freedom and liberty that we all cherish. All gave immeasurable sacrifice in terms of cost on their physical health, their mental well-being, and the stress placed on their families and loved ones. It should be our duty and privilege to serve them in return and help them to succeed in their civilian endeavors. When we

approach these individuals through the healthy warrior lens, we see that they are often peak performers, mentally, physically, and characterologically. It is through their brave willingness to serve this country that they may acquire unique needs and present to college with backgrounds and experiences different from traditional first-year students. The onus is on the community and the campus to recognize their resilience and ensure these individuals are welcomed, respected, and poised for success.

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