



Green Zone: Developing and Evaluating a Training to Support Student Veterans

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GREEN ZONE: DEVELOPING AND EVALUATING A TRAINING TO SUPPORT
STUDENT VETERANS

By

Kari A. Weiterschan

A DISSERTATION

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Kari A. Weiterschan

Approved:

Lydia P. Buki, Ph.D.
Associate Professor of Counseling Psychology

Daniel Santisteban, Ph.D.
Professor of Counseling
Psychology

Edison Trickett, Ph.D.
Visiting Professor of Counseling Psychology

Guillermo Prado, Ph.D.
Dean of the Graduate School

Gail Cole-Avent, Ph.D.
Associate Vice President of Student Life
California State University – San Marcos

WEITERSCHAN, KARI A.

(Ph.D., Counseling Psychology)

Green Zone: Developing and Evaluating a
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Following the enactment of the Post-9/11 GI Bill, the number of student veterans pursuing higher education increased exponentially. The influx demanded institutions establish new policies, procedures, and programming to meet the needs of this student demographic. Best practice recommendations are now well-established and have been implemented on many campuses, yet research examining the effectiveness of these interventions has been limited. Scholars have therefore been called to action to address this research gap and advance our supportive practices for student veterans in higher education. One of the veteran-focused programs that has received little attention from scholars but has been initiated at over 100 academic institutions is *Green Zone*. First pioneered at Virginia Commonwealth University, the *Green Zone* program was designed to educate campus staff, faculty, and students on issues relevant to understanding and addressing the needs of student veterans. The overarching goal of the program was to facilitate campus community members' development of cultural competencies in military and veteran issues and thereby foster inclusive and supportive campus environments for student veterans. Although other institutions have followed recommendations to develop similar programming, a systematic evaluation of the effectiveness of the *Green Zone* program has not yet been conducted. Colleges and universities have also been tasked with

developing distinct programs given the absence of a gold standard *Green Zone* protocol to reference. To enhance the viability of our practices, it is imperative that institutions develop and rigorously evaluate veteran-focused programming that is initiated on their campuses. Such efforts would shed light on whether our interventions are achieving their intended purposes and safeguard against the misallocation of resources to ineffective efforts. The current study represents an attempt to fill this research gap by providing the first systematic evaluation of a *Green Zone* training program. Specifically, a community-based intervention research design was utilized to guide the development and administration of a *Green Zone* program at a Southeastern university. Mixed methods were utilized to collect data from diverse university staff, faculty, and student participants to (a) identify strengths and limitations of the program as well as potential modifications to enhance its viability, and (b) examine the effectiveness of the program for increasing participants' knowledge of the military and student veterans. Findings from the study demonstrated the program was effective for enhancing participants' knowledge and perceived competence to support student veterans. Additionally, results revealed important insights on modifications to the *Green Zone* content, organization, and delivery that would enhance future administrations and support sustainment of the program. The study offers important considerations for future program development efforts at the university as well as other institutions making decisions about initiating *Green Zone* on their campuses. The *Green Zone* manual and training materials designed for the study purposes will be made available by request to promote the development and enhancement of the program at other colleges and universities.

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CHAPTER I:

INTRODUCTION

Since 2008, the number of student veterans pursuing postsecondary education has doubled, from approximately 500,000 to over 1 million (Dortch, 2017), garnering the attention of public policymakers and university administrators. As a point of reference, “student veterans” include active-duty service members, reservists, and National Guard personnel, as well as military veterans, enrolled at postsecondary institutions (National Center for Posttraumatic Stress Disorder [NCPTSD], 2014). Scholarship focusing on understanding the experiences and needs of this unique student group has proliferated alongside the increase in veteran enrollment, identifying unique opportunities and challenges in the transition from “boots to books” (e.g., Elliott, 2015; Osborne, 2014; Rumann & Hamrick, 2010; Ryan, Carlstrom, Hughey, & Harris, 2011). Like most students entering college for the first time, veterans must learn how to navigate and negotiate the policies, procedures, social norms, and inherent values of a new and unfamiliar setting. For veterans, the stark contrast between military and civilian life can make the transition to academia all the more challenging (Center for Deployment Psychology [CDP], 2017). Many veterans have described their reentry to civilian life after military service as a “culture shock,” akin to the experience of immigrating to a foreign country (DiRamio & Jarvis, 2011; Glasser, Powers, & Zywiak, 2009). Adjusting to life outside of the military often requires (re)negotiations of personal identity, beliefs, values, and behavioral norms, and presents significant psychosocial challenges for veterans (Koenig, Maguen, Monroy, Mayott, & Seal, 2013; Yosick et al., 2012). The formidable task of reconciling military and civilian identities is further complicated for

veterans entering higher education as they are tasked with adopting and integrating yet another identity as a student. Many student veterans concurrently cope with service-related impairments, feelings of grief and loss related to their separation from the military and fellow service members and competing commitments such as childcare and employment (Bedder, Coe, & Sommer, 2011; Demers, 2011; Koenig et al., 2013). These factors present additional barriers to student veterans' academic success and well-being (e.g., Durdella & Kim, 2012; Elliot, Gonzalez, & Larsen, 2011; Livingston, Havice, Cawthon, & Fleming, 2011; Shackelford, 2009).

Barriers to Social Integration

Upon entering the military, individuals undergo extensive and rigorous training to “strip them of their civilian identity” and instill in them the “warrior ethos” (Demers, 2011, p. 162). Central to the warrior ethos is the unwavering fidelity to a collective mission and shared values such as selflessness, comradery, discipline, perseverance, personal excellence, and stoicism (CDP, 2017). The all-encompassing vigor of military training and culture facilitates veterans' retention of the warrior ethos long after formal separation occurs (Stachyra, 2011). As such, veterans entering academia—an environment where individualism, freedom of expression, and autonomous decision-making are celebrated—have reported experiencing a loss of comradery and sense of purpose, frustration, confusion, and feelings of estrangement accompanying the clashing of the cultures (DiRamio, Ackerman, & Mitchell, 2008; Elliot, Gonzalez, & Larsen, 2011; Rumann & Hamrick, 2010).

Student veterans have unsurprisingly reported significant challenges with social integration and the formation of supportive peer networks on college campuses. Actual or

perceptive differences between veteran and non-veteran students may partly account for these difficulties. For example, in contrast to students who enter college directly from high school, veterans are more likely to be over the age of 25, married with children, financially independent, and to have attended two or more academic institutions (Bauman, 2009; Cate, Lyon, Schmeling, & Bogue, 2017; Ochinko & Payea, 2018); these demographic characteristics have been found to impede student veterans' social integration and sense of belonging on college campuses (Elliot et al., 2011; Kim & Cole, 2013). Rumann and Hamrick (2010) also found that student veterans' perceptions of themselves as more mature and self-disciplined than their peers contributed to both feelings of empowerment and estrangement that hindered social connection and support. In addition, student veterans have reported feelings of marginalization on account of discriminatory treatment from peers and faculty who they perceived as having minimal knowledge of military culture or espousing untoward stereotypes about veterans (Osborne, 2014; Persky & Oliver, 2010).

Feelings of marginalization and social isolation have been found to negatively influence academic and health outcomes for other student minority groups such as Latinos and African Americans (e.g., Hurtado & Carter, 1997; Nora & Cabrera, 1996). Related, the degree to which students with marginalized identities feel a sense of belonging and perceive their campus climate to be inclusive and supportive has been found to influence their well-being and adjustment to college (Hurtado, Alvarez, Guillermo-Wann, Cuellar, & Arellano, 2012; Tinto, 1993; Woodford & Kulick, 2015). Some researchers have found similar associations between student veterans' sense of belonging, perceptions of their campus climate, and outcomes in higher education

(Campbell & Riggs, 2015; Durdella & Kim, 2012; Elliot, 2015). As such, academic institutions should strive to create environments that foster student veterans' maximal participation in campus life, thereby promoting their academic success and well-being. In fact, student veterans acquire skills and strengths during their military service that can serve to enhance campus communities if efforts are made to promote their development, personal welfare, and contributions (Cate, 2014). One way for institutions to facilitate student veterans' engagement and sense of belonging is to recognize the barriers to academic participation that exist for them, which include service-related injuries.

Mental and Physical Health Concerns

In a comprehensive report published by Student Veterans of America (Cate et al., 2017), nearly half of the student veterans that were sampled reported having a service-connected disability for which they received compensation through the Veterans Benefits Administration (VBA); the majority reported a disability rating from the VBA that was over 50%, suggesting substantial impairment. Roughly 80% of the same veteran sample indicated their impairment caused significant distress while pursuing their academic studies. Among post-9/11 veterans, which constitute the majority of student veterans on college campuses, the most common service-related disabilities include musculoskeletal degeneration of the spine and limbs; auditory impairment (e.g., hearing loss, tinnitus); neurological conditions (e.g., traumatic brain injury [TBI], chronic headaches, nerve paralysis); and mental health conditions such as Post-traumatic Stress Disorder (PTSD) and Major Depressive Disorder (National Academies of Sciences, Engineering, and Medicine, 2018; VBA, 2018b). Managing academic responsibilities alongside physical and mental health issues can make it more difficult for veterans to engage in campus life,

participate in classroom activities, complete academic assignments, and socialize with peers (e.g., Black, Westwood, & Sorsdal, 2007; Elliot et al., 2012; Griffin & Gilbert, 2015; Steele, Salcedo, & Coley, 2010). Consequently, service-related impairments have been associated with negative academic and health outcomes for student veterans (Cate & Davis, 2016; Church, 2009; Kraus & Rattray, 2013; Madaus, Miller, & Vance, 2009; Rudd, Goulding, & Bryan, 2011; Shackelford, 2014). Academic persistence and degree completion rates have been found to be lower among students with disabilities, in general (Rutowski & Cocchiarella, 2009). Although existing research examining veteran student outcomes has demonstrated mixed findings, the potential impact of service-related impairments on these students' academic functioning and well-being underscores the need for universities and colleges to be educated on, and prepared to address, the prevalent health concerns of this population.

Institutional Impasses

Coupled with the aforementioned barriers, existing research suggests cultural discrepancies between the military and academia present practical challenges for student veterans in terms of accessing and utilizing institutional resources on college campuses (e.g., Cook & Kim, 2009; Griffin & Gilbert, 2015; Hitt et al., 2015; Rumann & Hamrick, 2009, 2010). Having left an environment with a distinct chain of command and prescribed procedures governing day-to-day activities, student veterans have reported frustration on account of decentralized administrative leadership and ambiguous policies or procedures at their host institutions (Hitt et al., 2015; Kirchner, 2015). In the absence of a clearly defined “chain of command” and administrative guidelines, student veterans have reported being unsure who to turn to about academic and health-related issues

(Glasser et al., 2009). College campuses may be particularly underprepared to provide student veterans with guidance on enrollment and educational benefits (McBain, Kim, Cook, & Snead, 2012; Osborne, 2014). For example, student veterans have reported feeling ill-prepared to make informed decisions regarding their enrollment and utilization of educational benefits on account of insufficient leadership or clearly defined procedures at their host institutions (e.g., DiRamio et al., 2008; Livingston et al., 2011; Molina, Esqueda, & DeBraber, 2015). Some student veterans have cited these institutional barriers as contributing to unanticipated changes in their enrollment status and financial hardship, which subsequently interfered with their academic performance and persistence (Ackerman & DiRamio, 2009; Steele et al., 2010). Although the complex procedures involved in enrolling and certifying educational benefits through the VBA may partly account for the aforementioned challenges student veterans encounter, it is clear that this student group requires dedicated assistance with academic and financial planning (McBain et al., 2012). Academic institutions should ensure that adequate leadership is in place to provide student veterans with tailored advisement, streamlined enrollment, and efficient certification procedures in order to buffer against these challenges. Such institutional efforts would likely enhance student veterans' perceptions of their campus climate as inclusive and supportive, further facilitating their transition to academia as well as their academic success.

Current Recommendations for Supporting Student Veterans in Higher Education

The extant literature underscores the need for distinct university programming to facilitate student veterans' adjustment to campus life and address identified barriers to their success and well-being. In 2012, President Obama signed Executive Order No.

13607, initiating a partnership between the Administration, U.S. Department of Education, and DVA to ensure the accountability of academic institutions in addressing student veterans' transitional needs. The partnership established "8 Keys to Veterans' Success" outlining specific institutional practices for engendering inclusive and supportive campus environments for student veterans (Department of Education, 2013). Research subsequently burgeoned to support these recommended practices, which include creating programming specific to student veterans to address enrollment and educational benefits, academic and career development, and mental health issues unique to this population; hiring staff who are knowledgeable of student veterans' issues to spearhead veteran-focused programming; offering trainings to increase campus community members' awareness of military and veteran issues; creating a student veteran organization and designating a space for veterans to convene on campus to facilitate peer support and social integration; offering separate orientations and transition programs for student veterans; and developing websites featuring veteran-specific policies, procedures, and programming (e.g., Elliot et al., 2011; Glasser et al., 2009; McBain et al., 2011; Osborne, 2014). Many of these best practices are now well recognized by scholars and educators and have been instituted on college and university campuses nationwide.

Qualitative and phenomenological inquiries into student veterans' transition from the military to higher education have provided the theoretical frameworks for the current recommended best practices (e.g., DiRamio et al., 2008; DiRamio & Jarvis, 2011; Griffin & Gilbert, 2015; Livingston et al., 2011; Persky & Oliver, 2010; Rumann & Hamrick, 2010) yet research exploring the effectiveness of these interventions has been limited (Osborne, 2014). In addition, the limited survey-driven research that has been conducted

to evaluate existing programming has not taken into consideration ways in which community-based factors (e.g., campus climate, resources, leadership) influence the interventions' success in enhancing student veterans' academic and health outcomes. Few studies have employed intervention research designs, which would be better suited for examining and safeguarding the quality and effectiveness of our best practices (Barth, 2018). In particular, we know little about the effects of, or process for developing, veteran-focused trainings for staff, faculty, and students on college campuses. Among the few articles that have been published on the implementation and outcomes of such trainings (e.g., Nichols-Casebolt, 2012; Osborne, 2014), the rigor of the methods employed in the studies could not be determined from the information provided. The articles were either not peer-reviewed or offered speculative findings. As there has been a call for scholars to rigorously examine and evaluate the recommended best practices for supporting student veterans in higher education (Kirchner, 2015), which includes offering veteran-focused professional development trainings for staff, faculty, and students, the aforementioned limitations in the literature are concerning. The current study was initiated to respond to this call and contribute to expanding the scholarship focused on veteran student programming.

Preliminary Investigation

The current study was initiated at a Southeastern university and represents an extension of a preliminary investigation that was conducted at the same institution from 2015 to 2017 (Weiterschan, Buki, & Sabet, 2017). In the previous study, the researchers utilized the Community Readiness Model (CRM; Plested, Jumper-Thurman, & Edwards, 2015) to assess the university's readiness to meet the needs of student veterans on

campus. Six dimensions of community readiness were evaluated: (a) available efforts, (b) knowledge of efforts, (c) leadership, (d) knowledge of the problem, (e) community climate, and (f) resources (Plested et al., 2015). According to the CRM, stages of community readiness range from 1 (*no community awareness or supports related to the issue*) to 9 (*community ownership in addressing the issue*) and are used to determine the lowest-scoring dimension that should be targeted for intervention. The CRM provided the most suitable framework for this preliminary research given its previous applications in assessing the needs of minority student groups within academic communities (Rivera-Ramos, Oswald, & Buki, 2015). The CRM and specific procedures involved in this preliminary research are described in further detail in the Method section.

Importantly, the preliminary investigation helped identify the need for additional veteran-focused programming at the university. The findings revealed community members' knowledge of student veterans' needs was at the denial/resistance stage of readiness; this stage reflects limited awareness or understanding of the issues concerning student veterans, as opposed to active denial or resistance. The majority of students, staff, and faculty who participated in the study perceived the lack of knowledge within the community to be a significant barrier to student veterans' social integration, campus adjustment, and well-being. Community knowledge is, indeed, a critical component of campus climate—a concept that has been somewhat equivocally defined by scholars but associated with academic and health outcomes for minority group students (Edman & Brazil, 2009; Hausmann, Schofield, & Woods, 2007; Smedley, Myers, & Harrell, 1993). Given the urgency of creating inclusive and supportive campus environments for student

veterans, the findings from the preliminary investigation highlighted an opportunity for intervention to ensure the university met this objective.

Current Investigation

The current study involved the development, administration, and evaluation of a *Green Zone* program aimed at providing university community members information relevant to understanding and supporting student veterans on campus. Other colleges and universities have implemented similar educational programs on their campuses, some of which are likewise titled *Green Zone*. Specifically, Green Zone references the International Zone of Baghdad—military-fortified area in central Baghdad, Iraq, measuring about 4 square miles, established in 2003 to provide U.S., international, and local Iraqi coalition forces a place of refuge from ongoing unrest in surrounding territories. The first *Green Zone* program was pioneered by Nichols-Casebolt (2012) at Virginia Commonwealth University (VCU) and modeled after LGBT Safe Zone/Ally programs, which have been found to enhance awareness and support for sexual minority students on college campuses (e.g., Finkel, Storaasli, Bandele, & Schaefer, 2003; Poynter & Tubbs, 2008).

To my knowledge, no gold standard protocol or manual to guide the implementation of *Green Zone* on college campuses currently exists, although various resources, including PowerPoint presentations and web-based modules, are available. In general, the programs provide audiences information on a broad range of topics relative to understanding military and student veteran populations (e.g., basic military terminology, population demographics, common service-related impairments, challenges inherent in the military-student transition). The overarching objective of *Green Zone*

programs is to facilitate audience members' awareness and knowledge of military and student veteran populations to promote inclusive, culturally sensitive, and supportive campus climates for student veterans. As limited research has been conducted to examine the effectiveness of *Green Zone* programs or to provide substantive program development recommendations, the current study was initiated to advance the existing scholarship in this area.

Specifically, utilizing a community-based intervention research design, mixed methods were employed over three phases of data collection with the following aims:

- (1) To systematically develop a manual to guide the implementation of a *Green Zone* program at a Southeastern university,
- (2) To administer the program to staff, faculty, and students at the university based on the developed manual,
- (3) To identify the need for modifications to the program based on participants' feedback, and
- (4) To assess the preliminary effectiveness of the training for increasing participants' knowledge of the military and student veterans.

To achieve the first and second aims, a *Green Zone* program was systematically developed and implemented on campus. A diverse sample of staff, faculty, and students were recruited to participate in the training to enhance the applicability of the study findings. To achieve the third study aim, participants were asked to provide written feedback on the training and to participate in focus group interviews. In addition, quantitative measures were administered prior to and following the training, to assess changes in participants' knowledge of the military and student veteran population,

consistent with the *Green Zone* program content. These data were collected to achieve the fourth study aim. The qualitative data (i.e., participants' written and verbal feedback on the training) were also used to enhance the interpretation of findings from the quantitative analyses. Findings from the study offer insights into the effectiveness of the program for university community members as well as potential modifications to strengthen the content and delivery for future administrations. The findings also highlight key areas for academic institutions to consider in making decisions about developing and implementing a *Green Zone* program. In the next chapter, I will provide a more extensive review of the extant literature and rationale for the study.

CHAPTER II:

LITERATURE REVIEW

Service members and veterans of the United States Armed Services (hereafter referred to as U.S. military) and National Guard currently living in the U.S. and its territories comprise roughly 10% of the general population (Department of Veterans Affairs, 2019). Approximately 2.2 million served in Post-9/11 military operations, which included Operation Iraqi Freedom (2003-2011), Operation Enduring Freedom (2001-2014), Operation New Dawn (2010), and Operation Freedom's Sentinel (2015-present), and are currently amongst our nation's veterans (Department of Defense [DoD], 2015; National Center for Veterans Analysis and Statistics, 2015). Due in part to advances in weaponry, tactical equipment, and battlefield procedures, the rate of survival for recent wartime cohorts has exceeded those of previous generations (Institute of Medicine, 2010), contributing to the most unprecedented surge of military veterans into employment and education sectors since World War II (Kirchner, 2015). In addition, an increasing number of post-9/11 active and reserve duty military service personnel have pursued postsecondary education (Wenger et al., 2017). These trends have garnered the attention of political leaders and government officials who have made it a national priority and advanced public policy to ensure academic, employment, and healthcare settings provide adequate support for service members and veterans.

Researchers have contributed to these efforts by examining the transitional experiences and outcomes of service members and veterans in vocational and health care settings. Findings from these research initiatives have consistently underscored the need for culturally sensitive, supportive programming to facilitate service members'

reintegration into civilian life, professional development, and well-being (e.g., Demers, 2011; Hosek, Kavanagh, & Miller, 2006; Institute of Medicine, 2010). This is especially critical in the higher education sector given the substantial increase in student veteran enrollment at colleges and universities nationwide in the past decade and the projected population growth (NCPTSD, 2014). As such, the following literature review is organized to first discuss how the study fits within the larger field of counseling psychology. Next, I provide an overview of military culture and characteristics as well as common reintegration experiences among veterans. A multidimensional theory of human transition is utilized as a framework for reviewing the extant scholarship focused on student veterans' adjustment and adaptation to higher education. Finally, the implications of the literature review are highlighted to underscore the rationale for the current investigation.

Counseling Psychology and Veterans

In the early 1940s, around the same time the American Psychological Association recognized counseling psychology as an official subspecialty, there was an increased demand for healthcare professionals to address the needs of returning World War II (WWII) veterans (Baker & Pickren, 2007). Recognizing the unique vocational and emotional needs of this veteran cohort, the Veterans Administration (VA) authorized the establishment of mental hygiene clinics and hiring of clinical psychologists within VA hospitals (Whiteley, 1984). In 1952, Robert S. Waldrop, a WWII Naval veteran and pioneer in the field of counseling psychology, was appointed Director of Vocational Counseling at the VA Central Office. During his time as Director, Waldrop established Vocational Counseling as an independent service, and created official appointments for

counseling psychologists within the VA healthcare system (Nutt, 2014). As WWII veterans began enrolling in higher education institutions in unprecedented numbers, Waldrop also recognized a need for counseling psychologists to be trained to address the vocational and psychological needs of this population on college and university campuses. Much of the career development research as well as the counseling theories and orientations that emerged during the 1950s were facilitated by clinical and counseling psychologists working with veteran populations (Baker & Pickren, 2007).

By the 1960s and 1970s, the Vietnam War and social movements in the U.S. captured the attention of counseling psychologists, who were influential in distinguishing the profession as one that was, and still is, focused on examining issues of diversity and promoting equality for cultural minorities. Consistent with this mission, the American Psychological Association (2002) created the first *Guidelines on Multicultural Education, Training, Research, Practice, and Organizational Change for Psychologists*, which underscore the importance of recognizing cultural aspects of individuals' development and well-being. These Guidelines are particularly relevant to the current investigation, which involves acknowledging and engendering community support for student veterans, a unique cultural minority group. Despite counseling psychologists' historical contributions to promoting the well-being of veterans, and the fact that counseling psychology's initial growth was associated with veterans' return from WWII, there have been few publications focused on this population within the field in recent years. Thus, the current study will help address this limitation, consistent with counseling psychology's core values, which include promoting support for underserved, marginalized populations.

Military Culture

The U.S. Armed Forces (hereafter referred to as the military) is a complex institution comprised of multiple, distinct branches of service that include the Air Force, Army, Marine Corps, Navy, and Coast Guard, all of which are headed by the largest employer in the world—the Department of Defense (McCarthy, 2015). Of note, the National Guard is not considered a branch of the military but operates reserve components in the Army and Air Force; it is primarily state-controlled, responsible for domestic security and disaster-relief operations, and receives joint federal funding from the DoD and Department of Homeland Security, both of which, in certain circumstances, have the authority to activate personnel to carry out military operations. Service members in each branch of the military fulfill active (full-time) or reserve (part-time) duties as a part of their service commitment. National Guard members typically serve non-active, part-time duties. Service members are further distinguished by enlistment status (i.e., enlisted personnel, enlisted non-commissioned officer, commissioned officer) and rank. Rank titles vary across branches but denote a service member's position of authority within the military power hierarchy (i.e., chain-of-command), with the Commander in Chief (i.e., presiding President) being the highest station within the leadership structure. Both enlistment status and rank determine the extent of commitment and responsibility service members have within the military, as well as their level of training, experience, and pay grade. For example, an active duty, non-commissioned, Major General within the U.S. Marine Corps is typically promoted after years of experience, receives one of the highest pay grades, and is responsible for commanding division units comprised of thousands of service members. In contrast, an active duty, enlisted Private in the Army

represents entry-level training and thus receives a modest initial pay grade and has the lowest level of leadership authority.

Moreover, individuals entering the military, whether by enlistment or commission, must complete extensive pre-entry training. The nature of this training is unique to each branch but uniformly involves a process of deindividuation: “The basic formula for creating soldiers is to strip them of their individual identities; push them to their limits physically, mentally, and emotionally; and build them up with a new identity based on obedience to authority and loyalty to their fellow soldiers” (Black et al., 2007, p. 5). This new identity is reflective of the warrior ethos, which disavows individualistic principles and promotes devotion to a collective mission and strict moral code of selflessness, personal excellence, perseverance, and stoicism (CDP, 2017). The culmination of this training is the formal confirmation of the individual’s status as a member of the U.S. military, which precipitates subsequent designations of their Military Occupational Specialty (MOS) or career title. Cognitive functioning and aptitude tests, as well as physical performance standards achieved during training, are used to determine service members’ MOS, which broadly defines their job skills, work environment, and day-to-day responsibilities. The number of MOSs in the military are extensive; examples include combat infantry, aviation mechanic, artillery engineer, and cryptologist. Following assignment, service members complete Advanced Individual Training in their MOS, which ranges in duration depending on the complexity of the specialization.

After all preliminary training has been completed, service members are assigned a Permanent Change of Station (PCS), which denotes the domestic base where they will report for orders on fulfilling their military obligations and often requires service

members and their families to relocate. In addition, service members can receive orders to leave their PCS or deploy to a domestic or foreign Forward Operating Base from their PCS at any time, often with little notice or time to prepare for the transition. Adjusting to the demands of daily life on a military base and managing pre-deployment preparations (e.g., participating in mission briefings and training exercises, securing childcare support, locating employment opportunities for spouses, updating travel documents and living wills) can be very challenging for service members (CDP, 2017). Deployment often means departing from the typical comforts of daily living and separation from family and friends for lengthy periods of time—conditions service members have reported as significantly distressing (CDP, 2017). During times of active war or military conflict, service members are likely to be deployed to a combat zone and must prepare, physically and emotionally, for potential exposure to harsh climates and the threat of serious injury or death. Nearly 50% of post-9/11 service members deployed to Iraq and/or Afghanistan reported experiencing significantly distressing events and subsequent health impairments; four in ten reported sustaining serious injuries on deployment (Pew Research Center, 2011). Beyond the threat of injury or death, service members have reported inconsistent and unpredictable contact with loved ones and other aspects of separation as contributing to marital and familial discord during and subsequent to deployment (Allen, Rhoades, Stanley, & Markman, 2010; Riviere, Merrill, Thomas, Wilk, & Bliese, 2012). Service members deployed during an active war and peacetime have also reported challenges adjusting to the conditions of deployment such as routine sleep deprivation, strenuous physical labor, uncertain and unpredictable work schedules, and profound boredom (CDP, 2017). On-the-job performance may, in some cases, determine life or death,

meaning service members must exercise incredible discipline in applying technical skills and making critical decisions in tense situations (Osborne, 2014). At the same time, deployment can provide service members opportunities for personal growth, career development, and fostering comradery with peers. Throughout a service members military career, a collective-oriented ethos is necessary for mission completion; this mentality can serve as both an asset and barrier for service members upon returning home from deployment or formally separating from the military.

Reintegration

Service members' departure from military life and reentry to civilian society, whether temporary or permanent, is thought to be a cross-cultural transition, often referred to as *reintegration* (Elnitsky, Fisher, & Blevins, 2017). For those returning from deployment to fulfill military obligations at their PCS, reunification with family members and loved ones is often a celebrated occasion; readjusting to civilian life and changes in their home and work environments can be challenging, however. Many service members returning from deployment have reported experiencing relational strain and conflict (Pew Research Center, 2011), difficulty renegotiating daily routines and responsibilities (Basham, 2008), emotional distress and grief over the loss of fellow service members and other events that occurred on deployment (Simon et al., 2017), and health-related consequences of injuries sustained in theater (e.g., Bryan, Jennings, Jobes, & Bradley, 2012; Coll, Weiss, & Yarvis, 2011; Purcell, Koenig, Bosch, & Maguen, 2016). The challenges associated with deployment and reintegration increase service members' risk for suicide. In fact, suicide remains the second leading cause of death among service members (CDP, 2017). Individuals who witnessed a traumatic event or sustained an

injury on deployment may have greater difficulty adjusting to civilian life (Morin, 2011) and, in turn, be at higher risk for suicide.

Separating from the military involves a tangible transformation of personal status from service member to veteran as well as the renegotiation of identity and attainment of new cultural competencies (Demers, 2011; Iverson & Anderson, 2013; Stachyra, 2011). The stark contrasts between military and civilian life—the former being characterized by a collective ethos and purpose, structure, hierarchy, and strict self-discipline, and the latter by embracing individualism, flexibility, egalitarian relationships, and liberalism (CDP, 2017)—is often experienced as a “culture clash” for veterans and service members alike (DiRamio et al., 2008; Glasser et al., 2009; Koenig et al., 2013). For service members, military leadership, fellow service personnel, and institutional resources can offer support to navigate these cultural discrepancies and associated challenges. Veterans, in contrast, must establish a sense of self and purpose outside the military structure (Osran, Smee, Sreenivasan, & Weinberger, 2010); many may lack access to adequate support or be reluctant to ask for assistance to navigate the transition to civilian life (Elliot et al., 2011). As such, reintegration has been associated with a host of personal, relational, and occupational stressors for veterans.

For example, veterans have reported experiencing significant tension and role confusion within their family unit and social networks (Dekel, Goldblatt & Keidar, 2005; Galovski & Lyons, 2004; Romero, Riggs, & Ruggero, 2015); feelings of grief and loss over the absence of comradery and concentrated support from fellow service members (Koenig et al., 2013; Simon et al., 2017); diminished sense of purpose, meaning, and belonging (Black et al., 2007; Brenner et al., 2008; Osran, 2010); and difficulty

interacting, communicating, and establishing meaningful connections with civilians due to perceived cultural differences (e.g., Demers, 2011; Hinojosa & Hinojosa, 2011; Hosek et al., 2006; Sayer et al., 2010). In addition, many simultaneously cope with the health consequences of service-related injuries, most commonly musculoskeletal and nerve damage, tinnitus, TBI, and mental health conditions such as PTSD and Major Depressive Disorder (VBA, 2018b). Veterans who have a disability also encounter barriers to securing adequate employment, educational opportunities, and housing (Bureau of Labor Statistics, 2016; DiRamio & Spires, 2009), which puts them at risk for homelessness and suicide (Mares & Rosenheck, 2004; NCPTSD, 2006). In fact, it has been estimated that nearly 20 veterans commit suicide each day (Office of Suicide Prevention, 2016), although the accuracy of these statistics has been debated in recent years on account of potential underreporting and misrepresentation of risk across veteran cohorts. Nonetheless, the challenges associated with reintegration have profound implications for veterans' health and well-being, underscoring the critical need for adequate transitional programs and support.

One context within which veterans are likely to need support is higher education. The enactment of the Post-9/11 Veterans Educational Assistance Act (2008), commonly known as the Post-9/11 GI Bill, provided the most substantial educational benefits for veterans since the establishment of the original GI Bill in 1944 (O'Herrin, 2011; Steele et al., 2010). The Bill provides veterans full coverage of costs for in-state tuition and fees at public institutions, and partial costs of tuition and fees for out-of-state or private institutions (VBA, 2012). Beneficiaries also receive a monthly housing allowance and a maximum annual book stipend of \$1,000. Any honorably discharged veteran who served

on active duty for at least three years post-9/11 is eligible to receive these Post-9/11 GI Bill benefits; service members still on full-time active duty with at least 90 days of aggregate service post-9/11 are also eligible. These benefits also extend to dependents (e.g., spouses, children, parents) of service members and veterans. In addition, the Post-9/11 GI Bill facilitated the establishment of the Yellow Ribbon Program to supplement costs for private and out-of-state tuition. The Program allows degree-granting institutions to voluntarily partner with the DVA to match up to 50% of tuition costs not covered by the Bill (VBA, 2014). The Post-9/11 GI bill and Yellow Ribbon program have provided significant incentives for post-9/11 veterans to pursue postsecondary education, contributing to the substantial increase in the population on college campuses.

In fact, the number of veterans utilizing educational benefits has doubled since 2008 (Dortch, 2017). A recent report published by the SVA found that over 1 million student veterans utilized educational benefits annually between 2009 and 2013, compared with an estimated 500,000 in previous years (Cate et al., 2017). In 2018, over two-thirds of student veteran beneficiaries (approximately 900,000 in total) utilized the Post-9/11 GI Bill to cover postsecondary education expenses (VBA, 2018a). These estimates provide some insight into the number of veterans in higher education, yet there are several limitations of the existing systems used to track these students' enrollment and higher education outcomes. For example, existing DoD and VBA systems cannot account for students who do not utilize veteran educational benefits programs to cover the costs of their schooling, and some research has suggested a sizable number of student veterans utilize other federal and private student aid funding sources (Cate et al., 2017; Ochinko & Payea, 2018b). In addition, the National Student Clearinghouse and other student data

reporting and exchange organizations are only able to furnish information on individuals who voluntarily select to identify as a veteran, which some may not elect to do. Many of the existing data repositories also exclude students who transfer schools, temporarily withdraw from school, attend school part-time, or pursue vocational certificates, which characterizes the academic trajectory of many veterans (Cate, 2014). Taken together, the number of student veterans currently enrolled in higher education may exceed the current population estimates.

Nonetheless, the sizable increase in student veteran enrollment rates at colleges and universities nationwide following the enactment of the Post-9/11 GI Bill inspired then-President Barak Obama's Executive Order No. 13,607 (2012). This Order established "Principles of Excellence" for academic institutions receiving federal funding from military and veteran's educational benefits programs to ensure that student veterans and their dependents were receiving adequate information and support in the context of higher education. Scholarship focused on student veterans subsequently burgeoned, providing significant insights into the experiences of veterans transitioning from the military to academia to support the established Principles.

From Boots-to-Books

A transition has been broadly defined as an event that "results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behavior and relationships" (Schlossberg, 1981, p. 5). Although many theoretical frameworks for understanding human adaptation to transition exist (e.g., Erikson, 1950; Levinson, 1986; Lowenthal, Thurnher, & Chiriboga, 1975), Schlossberg's (1981) model has been used as a framework in several studies exploring the military-student transition

(e.g., Griffin & Gilbert, 2015; Ryan et al., 2011; Schiavone & Gentry, 2014). As a counseling psychologist, Schlossberg proposed that individuals' successful adaptation to transitional life events could be precipitated or impeded by characteristics of (a) the situation (i.e., source, timing, onset, duration of the transition, as well as individuals' perceptions of accompanying role changes or losses), (b) the self (i.e., individual factors such as age, sex, race/ethnicity, health status, psychosocial competence), and available support (i.e., internal, social, and institutional resources). How well an individual is able to balance resources and deficits along these dimensions, as well as differences between the pre- and post-transition environments, also influences transitional outcomes. The comprehensiveness of Schlossberg's model makes it a solid framework for understanding veterans' experiences and outcomes in the military-to-student transition. As such, the model is used to organize subsequent discussions of the extant literature in this area.

The Situation. Entering higher education for the first time involves full- or part-time immersion in a novel environment and necessitates changes in an individual's normative routines, responsibilities, and social engagements. For many students, the transition to college can present both opportunities and challenges. Consistent with Schlossberg's model, students' successful adjustment to this transition is predicated on several factors, including (a) the developmental timing (appropriate or disruptive), onset (abrupt or graduated), and duration (permanent, temporary, uncertain) of their college entry and experience; (b) the source of their motivation to enter college (internal or external); and (c) their perceptions of the gains or losses associated with inherent role changes (positive or negative) in becoming a student. The degree of control that students

perceive themselves as having over these aspects of transition also influences their adjustment.

Timing, Onset, Duration. Entering college for the first time is akin to what Schlossberg defines as a “scheduled,” “gradual” transition, whereby an individual makes a conscious decision to enroll and progresses toward degree completion; such a transition is often accompanied by fewer stressors than an unanticipated or abrupt change in one’s developmental trajectory, as may be the case with sudden job loss or retirement. As the majority of student veterans are between the ages of 25 and 40 (Cate et al., 2017), the developmental timing of their college enrollment differs from that of traditional students who matriculate directly from high school. Some student veterans may enter higher education shortly after separating from the military whereas others may enroll years later, following marriage, becoming a parent, and/or being employed in the private sector. The timing of student veterans’ entry is likely to influence the degree of stress they experience in the transition. For example, student veterans who are older, married, or employed while enrolled in college have reported unique challenges establishing social support and managing academic demands (e.g., Elliot et al., 2011; Kim & Cole, 2013; Rumann & Hamrick, 2010). The duration of the college transition and perceived temporality of associated stressors may also influence student veterans’ successful adaptation and outcomes in higher education. Existing research has suggested that a third of student veterans enroll in 2-year programs (34.2%) and then transfer to 4-year institutions to obtain a bachelor’s degree (Cate, 2014). The number of veterans pursuing graduate degrees has also increased significantly in the past few years (Zhang, 2018). The majority of first-time veteran students enroll in at public institutions (58%); 37% enroll at for-

profit institutions and only 6% enroll at not-for-profit schools (Ochinko & Payea, 2018a). The quality of institutional support for veterans at these institutions varies, and students enrolled in for-profit institutions may be particularly vulnerable to attrition and other adverse academic outcomes (Ochinko & Payea, 2018a; U.S. Senate Committee on Health, Education, Labor, & Pensions, 2012). The type of institution and degree or certificate program in which veterans enroll largely determines the duration of the college transition and may influence their transitional outcomes. More research is needed to understand how the developmental timing in relationship to institutional characteristics and duration of veteran students' college transition process influences their adjustment and outcomes in higher education.

Motivation. Whether a transition is motivated by internal or external sources has also been posited to influence an individual's adjustment process (Schlossberg, 1981). For many student veterans, enrolling in college may be a way of regaining a sense of purpose and control over their lives after separating from the military. Student veterans who make a deliberate decision and engage in effective planning to enter higher education are likely to be better equipped to manage the stressors inherent in the military–student transition (Ryan et al., 2011). In contrast, student veterans who enroll in college as a result of external factors, such as an immediate precipitating event (e.g., being discharged from the military, unemployed, and needing to access educational benefits to ensure financial stability) or pressure from family members or friends, may be less prepared for success and encounter more challenges adjusting to student life. Unfortunately, there is limited research regarding how student veterans' motivations for enrolling in college may influence their transitional and academic outcomes.

Role Changes. As previously discussed, the military-to-civilian transition represents a unique situation in and of itself, necessitating a great deal of personal, relational, and occupational changes that can be challenging for many veterans to reconcile. Veterans have reported experiencing role confusion, loss of purpose and meaning, and other identity-based stressors (e.g., Black et al., 2007; Iverson & Anderson, 2013; Romero et al., 2015; Stachyra, 2011), which entering college for the first time could either exacerbate or help resolve. Student veterans who are concurrently still learning to cope with life outside of the military, as well as with the gains and losses that accompany their separation and reentry to civilian life, may have greater difficulty adapting to the military-to-student transition. The degree to which a student veteran maintains their military identity and aspects of the warrior ethos may also influence how well they adapt to this transition. For some, retaining the self-discipline, perseverance, and personal integrity promoted in the military could buffer transitional challenges and promote academic achievement and persistence. For others, the cultural discrepancies between the military and higher education may result in frustration and impede the development of social support to assist them in navigating the transition process (DiRamio et al., 2008; Livingston et al., 2011; Persky & Oliver, 2010).

The Self. Schlossberg (1981) posited characteristics of an individual, including their age, sex, gender identification, race and/or ethnicity, internal resources, health status, and psychosocial competence, are major determinants of successful adaptation to transition. The extant literature has suggested unique demographic characteristics of the student veteran population may promote or impede their college adjustment and

transitional outcomes. These characteristics and their implications for veterans' transitioning from the military to academia are reviewed in the subsequent sections.

Demographic Characteristics. Service members (1%) and veterans (3%) comprise a small segment of the national student undergraduate and graduate student population (American Council on Education, 2009), making them a minority group on most college and university campuses. In addition, student veterans have unique and diverse characteristics that distinguish them from traditional, non-student veterans. Of the estimated 1 million student veterans in higher education, the majority are male (73%) and identify as non-Latino White (68%; Cate & Davis, 2016). Compared with students who enter college directly from high school (i.e., traditional students ages 18-21), student veterans tend to be much older, with an estimated 79% being over the age of 25 upon first-time enrollment (Kim & Cole, 2013; Walton-Radford & Weko, 2011). A sizable proportion are also married (45%), financially independent and employed full- or part-time (46%), and in charge of caring for child dependents (45%); approximately 67% also identify as first-generation college students (Cate, 2014; Cate & Davis, 2016; Cate et al., 2017). Traditional students are comparably younger, less likely to be married and/or have dependents, and more likely to be financially dependent on caregivers (Choy, 2002; DeSawl, 2012; National Survey of Student Engagement, 2010). Student veterans are also more likely to have been enrolled at multiple institutions and be among transfers students in 4-year programs (Cate, 2014; Bond Hill, Kurzweil, Davidson Pisacreta, & Schwartz, 2019).

Existing research has suggested that first-generation students, students employed while enrolled in college, and students with dependents are at increased risk for non-

completion and attrition from college (Choy, 2002; Johnson, 2009). In addition, delayed enrollment, financial independence, disability status, and attending two or more academic institutions have also been found to negatively affect student persistence and degree attainment (see Molina et al., 2015). Considering the demographic characteristics of the population, student veterans may be at increased risk for experiencing adverse academic outcomes. Indeed, a recent study found that first-generation student status, disability status, and attendance at two or more institutions contributed to higher non-completion rates for student veterans compared with non-veteran students (Ochinko & Payea, 2018a). Moreover, service-related commitments among students on active, reserve, and National Guard duty (e.g., redeployment, monthly/annual training requirements) have been found to impede academic achievement and progress (e.g., incomplete coursework, loss of academic credits and scholarships; Ackerman, DiRamio, & Mitchell, 2009; Griffin & Gilbert, 2015), particularly for students who deploy while enrolled in college (DiRamio & Jarvis, 2011; Livingston & Bauman, 2013; Rumann & Hamrick, 2010). These findings suggest that concomitant employment and education can interfere with student veterans' successful adaptation to college and transitional outcomes.

Unsurprisingly, student veteran status has been associated with negative academic outcomes, including lower levels of degree attainment in comparison to traditional students (Teachman, 2005). A recent report from the SVA indicated the attrition rate for student veterans was 28% (Cate et al., 2017), which was slightly higher than the national average (26%; National Student Clearinghouse Research Center, 2017). An earlier study found nearly 37% of part-time and 16% of full-time student veterans dropped out of college within 9 months of enrollment (Walton-Radford, 2009). Veterans, compared with

non-student veterans, also appear to take longer to earn a degree and to take more “stop outs” (i.e., temporary breaks in enrollment), suggesting they may be less likely to persist in college than their peers (Ochinko & Payea, 2018a). Although concerning, the aforementioned findings on student veterans’ persistence and attrition are unlikely to be a reflection of their academic aptitude, but rather a reflection of the unique barriers they face in pursuing higher education. For example, many have external, competing commitments (e.g., employment, familial responsibilities, military service obligations) that could impede their continuous enrollment and potential for academic success. Like other student minorities, having difficulties establishing, or lacking access to, quality social and institutional support may also play a role in predicting student veterans’ engagement, academic achievement, or decision to leave college (Kuh, 1995). Although one study found that veteran status was negatively associated with GPA, even while accounting for variables such as extracurricular responsibilities, employment, and family obligations (Durdella & Kim, 2012), the researchers did not examine the effect of social and institutional support; more research is needed to examine the degree to which such support contributes to student veterans’ academic outcomes.

Recent scholarship has also challenged previous findings regarding student veterans’ performance and persistence in higher education. For example, Cate et al. (2017) found that student veterans outperformed their civilian counterparts in terms of their rate of success in higher education (i.e., combined average completion rate and continued enrollment rate). Student veterans reportedly completed college at a higher rate and were more likely to persist to degree completion compared with civilian and similar non-traditional student groups (Cate & Davis, 2016). Student veterans’ GPAs were also

found to be higher than the national average (3.35 compared with 2.94, respectively; Cate & Davis, 2016). Nonetheless, many student veterans must surmount significant barriers to achieve academic success. Veteran students with service-related impairments may be particularly vulnerable to experiencing transitional challenges and adverse academic and health outcomes.

Health Status. An individual's physical and mental health status is a significant predictor of their potential to adapt to a life transition. Veterans are nearly twice as likely as non-student veterans to have at least one disability (National Survey of Student Engagement, 2010). In a recent comparative analysis of veteran and non-veteran student outcomes, a significantly larger proportion of veterans indicated that they had a disability (27%) relative to non-student veterans (15%; Ochinko & Payea, 2018b). In a national sample, approximately 51% of student veterans reported that they had a service-related injury for which they received a VA disability rating (Cate & Davis, 2016). Having a disability has been negatively associated with students' persistence in college and degree attainment (deFur, Getzel, & Trossi, 1996; U.S. Department of Education, 1999). Disabled students are also more likely to drop out of college than students without a disability (Wessel, Jones, Markle, & Westfall, 2009).

As such, student veterans may experience physical or emotional challenges that impede their learning potential and academic engagement in higher education (Black et al., 2007; Madaus et al., 2009; Ostovary & Dapprich, 2011; Shackelford, 2009; Steele et al., 2013). Common physical impairments among those who served in the military post-9/11, which comprises the majority of student veterans on college campuses, are TBI, musculoskeletal and nerve damage resulting in chronic pain and neuropathy, tinnitus and

hearing loss, bodily disfigurements and scarring, and amputation or paralysis of limb(s) (VBA, 2018b). Among post-9/11 veterans, an estimated 11-28% sustained at least one TBI on deployment (Iraq and Afghanistan Veterans of America, 2008; MacGregor et al., 2010; Tanielian & Jaycox, 2008). Although TBIs vary by type (i.e., non-penetrative or penetrative) and severity (i.e., mild, moderate, severe), the consequences of such injuries include impaired executive functioning, attention and concentration, memory, vision, and hearing (APA, 2013; Tepe, Cernich, & Kelly, 2013), all of which may impede student veterans' academic performance (DiRamio & Spires, 2009). Further, chronic pain and other physical injuries can impair student veterans' ability to walk, sit, or write, making it difficult for them to ambulate on campus, remain seated for lengthy periods of time, participate in classroom activities, and/or complete academic assignments (Black et al., 2007; Church, 2009; Hopkins, Hermann, Wilson, Allen, & Malley, 2010). Student veterans with service-related injuries may also be reluctant to disclose these challenges to instructors or be confronted with faculty who lack awareness or knowledge on how to support them, which has been found to impede effective communication between student veterans and their course instructors (Church, 2009). Consequently, student veterans have reported their service-related impairments have caused significant distress during their academic studies (Cate & Davis, 2016).

In addition, student veterans may be vulnerable to certain mental health conditions as a result of their service. Existing research has produced mixed findings regarding whether student veterans are at greater risk for PTSD, anxiety, and depression (Barry, Whiteman, & Wadsworth, 2014; Canfield & Weiss, 2015; Grossbard et al., 2014; Hopkins et al., 2010). The prevalence of these conditions among post-9/11 veterans,

which comprises the majority of student veterans on college campuses, is nonetheless deserving of attention from educators. Indeed, several studies have found the percentage of student veterans diagnosed with PTSD or who reported posttraumatic stress symptoms (14%-46%; Rudd et al., 2011; Seal et al., 2010; Tanielian & Jaycox, 2008) was higher than the general population (6.8%-11%; Kessler et al., 2005). Student veterans who deployed to a combat zone, served in the Army or Marine Corps, or identify as African American appeared to be at even greater risk for developing PTSD (Elliot, 2015; Hoge et al., 2004; Nyaronga & Toma, 2015). Student veterans with PTSD have reported significant challenges adjusting to college (Campbell & Riggs, 2015). For example, veterans with PTSD have reported difficulty turning off combat survival skills and hyperarousal symptoms (i.e., impaired sleep, diminished concentration, increased startle response and irritability), which interfered with their learning and retention of academic material and participation in classroom activities (Black et al., 2007; Ellison et al., 2012; Ostovary & Dapprich, 2011). Mental health conditions such as PTSD, anxiety, and depression have been inversely related to academic performance and persistence (Grossbard et al., 2014; Weber, 2012), and found to contribute to elevated risk for suicide among veterans (Jakupcak et al., 2009).

In a national sample of 628 student veterans who served in Iraq and Afghanistan, approximately 46% endorsed thoughts of suicide, 20% had a plan, 10% were thinking about it often or very often, 7.7% had attempted, and 3.8% believed completion of suicide was likely or very likely (Rudd et al., 2011). Approximately 24-46% of this same sample reported experiencing symptoms of anxiety, depression, and PTSD. Military sexual trauma, substance abuse, chronic sleep disturbances, and thwarted or failed

attempts at belonging have also been found to increase student veterans' risk for suicide (Brenner et al., 2008; Rolbiecki, Pelts, & Albright, 2015). The prevalence of military sexual trauma among veterans has been estimated to be between 4-71% (Suris & Lind, 2008), with women being more likely than men to report these experiences (Katz, Cojucar, Beheshti, Nakamura, & Murray, 2012). Student veterans who experienced military sexual trauma may manifest symptoms of PTSD and have difficulty trusting others (Resick, Monson, & Chard, 2016), which, in turn, may hinder help-seeking and the establishment of social support on campus. Exposure to violent combat and high levels of human trauma on deployment have also been found to be predictive of greater risk-taking behaviors among post-9/11 veterans (Kilgore et al., 2008). Student veterans may be particularly prone to using alcohol or other substances to cope with transitional stressors. For example, several studies have found student veterans were more likely to engage in heavy episodic drinking and risky alcohol-related behaviors compared with non-student veterans (Barry, Whiteman, Wadsworth, & Hitt, 2012; Widome et al., 2011); this is especially concerning given such behaviors have been associated with more profound symptoms of PTSD and depression (Barry et al., 2012), which veterans appear to be vulnerable to, and may increase risk for suicide. Taken together, student veterans with physical or mental health concerns may require additional support to promote their successful transition to, and persistence in, higher education.

Psychosocial Competence. According to Schlossberg (1981), an individual's self-evaluations/esteem, general attitude about life, and behavioral coping mechanisms also play an important role in determining their successful adaptation to transition. Many student veterans may have developed personal values and internal resources from their

military training and experiences that promote self-confidence and efficacy to meet the demands of higher education. Indeed, student veterans have described their military experiences as contributing to increased academic self-efficacy (Schiavone & Gentry, 2014) and goal commitment (Rumann & Hamrick, 2010) while enrolled in college. Some veterans may have directed the operations of subordinate colleagues or been exposed to situations that required them to perform efficiently under intense pressure during their military service (CDP, 2017), engendering leadership skills and stress tolerance that could promote their academic achievement and engagement in college life.

Having an “active coping orientation” may also facilitate an individual’s adaptation to transition (Schlossberg, 1981). Existing research has suggested many student veterans seek support from their veteran peers to cope with transitional challenges, including a lost sense of camaraderie and social belonging after separating from the military, and difficulties navigating institutional procedures and services (Ackerman et al., 2009; Hopkins et al., 2010; Messina, 2015; Osborne, 2014; Schiavone & Gentry, 2014). One study found student veterans also endorsed greater intentions to seek religious support to cope with stress compared with their civilian counterparts (Currier, McDermott, & Sims, 2016). Maintaining the collective worldview instilled through military service may therefore serve as a protective factor for some veteran students. Anderson, Goodman, & Schlossberg (2012) noted, “In some cases, collective coping—that is, helping people share in a problem that they cannot undo individually—is essential” (p. 72) in adapting to transition. That said, aspects of the warrior ethos such as stoicism and mission-focused perseverance may make some student veterans reluctant to acknowledge personal difficulties, seek support from their peers or family members, or

utilize institutional resources when encountering challenges (Osran et al., 2010). Social and institutional support is crucial to facilitating students' success in higher education. The following section reviews existing research on support for student veterans in higher education that may buffer against the challenges many encounter in the military-to-student transition.

Support. The availability and quality of support an individual receives from external sources during a period of transition influences their adaptation process (Schlossberg, 1981). External sources of support may include intimate partners, family members, or friends, as well as available institutional and community-based resources. Colleges and universities have been encouraged to facilitate these supports for student veterans on their campuses to promote their integration, academic success, and well-being.

Interpersonal Support. One of the most challenging aspects of the transition to college, for many students, is coping with changes in their social networks. First-year students have reported experiencing a loss of connection and fear regarding changes in their pre-college relationships that contributed to emotional distress (Pittman & Richmond, 2008; Paul & Brier, 2001) and adverse academic outcomes (Martin, Swartz-Kulstad, & Madson, 1999). For student veterans, leaving behind family and friends to pursue a college education might exacerbate existing feelings of loss and social isolation that have been found to accompany separation from the military (Schiafone & Gentry, 2014). Having established deep and meaningful relationships with their fellow service members through shared experiences and a mutual sense of purpose (Koenig et al., 2013), veterans have reported difficulty cultivating the same sense of community, comradery,

and support upon enrolling in college. In fact, establishing social support and a sense of belonging on campus is among the most frequently cited challenges student veterans encounter in higher education (McBain et al., 2012). This is significant given that social support has been found to facilitate students' engagement and integration on college campuses, and, consequently, their persistence in higher education (Kuh, 1995).

With regard to establishing peer support, student veterans may have difficulty relating to their non-veteran peers as a result of divergent cultural values and personal attributes. For example, student veterans have reported perceiving themselves as having greater appreciation for cultural diversity, worldliness, personal discipline, goal commitment, and maturity than their traditional, non-veteran student counterparts (e.g., DiRamio et al., 2008; Livingston et al., 2011; Persky & Oliver, 2010). The distinct demographic characteristics of veteran and non-student veterans might also engender a degree of social distance that impedes student veterans' establishment of peer support (Bauman, 2009; Elliott et al., 2011). In particular, student veterans have reported that being older and having concurrent, external commitments (e.g., familial responsibilities, military service obligations, full- or part-time employment) contributed to feelings of estrangement from peers and thwarted potential for establishing interpersonal support (Osborne, 2014). Many student veterans also transfer from 2-year or technical colleges to 4-year institutions and live in off-campus housing, which may make it more challenging for them to establish peer support (Cate et al., 2017). Unsurprisingly, student veterans have reported less emotional support from peers than their civilian counterparts (Whiteman, Barry, Mroczek, & MacDermid Wadsworth, 2013).

Student veterans may also be susceptible to stereotyping and insensitive treatment from peers and faculty members that hinder the establishment of meaningful interpersonal connections. For example, student veterans have reported that emotionally distressing comments from civilian peers (e.g., “Did you kill anyone over there?” “Did you see anyone get blown up?”) contributed to their feeling marginalized and isolated (Rumann & Hamrick, 2010). Likewise, political differences and perspectives on war among non-student veterans and faculty members have resulted in interpersonal discord and feelings of frustration among student veterans (Elliot et al., 2011)—experiences that some student veterans have reported made them reluctant to contribute to classroom discussion (Rumann & Hamrick, 2010). The lack of knowledge about military culture among civilians (Garamone, 2019)—often referred to as the “military-civilian gap”—coupled with heavy media attention on PTSD, TBI, and violent behavior among veterans, also makes student veterans susceptible to inaccurate stereotypes (Hassan et al., 2010). Osborne (2014) found that student veterans’ exposure to stereotypes, particularly those related to their mental health status, impeded their social integration on campus. Academic institutions have been encouraged to offer on-campus events such as panel discussions or brown bag luncheons where veterans and civilian campus community members can interact and “bridge the gap” in understanding that may impede student veterans’ development of social support. Unfortunately, not all campuses have reported offering such opportunities for fellowship and social connection (McBain, 2012).

As such, student veterans may be more inclined to seek interpersonal support from fellow veterans (Cook & Kim, 2009; DiRamio et al., 2008; Elliott et al., 2011; Summerlot, Green, & Parker, 2009). Student veterans have described their relationships

with fellow veterans as critical to their college adjustment and cultivating a sense of belonging at their host institutions (Osborne, 2014). To facilitate these social supports, colleges and universities have been encouraged to establish student veteran organizations and to provide a dedicated space for them to convene on campuses. Some student veterans may be reluctant to seek out or utilize such supports, however (Alfred, Hammer, & Good, 2013). For example, veterans with families, service-related commitments, and other external responsibilities are likely to face significant barriers to social engagement. Combat veterans, who are particularly vulnerable to PTSD, moral injury (i.e., profound feelings of shame and guilt related to perceived moral transgressions in the context of war), and other mental health issues, may experience symptoms that naturally impede their ability to engage socially and elicit peer support (Maguen et al., 2009, 2011; Purcell et al., 2016; Romero et al. 2015). Student veterans also have different values and goals upon enrolling in college, which may influence the degree to which they engage with veteran peer networks. For example, some student veterans may view college as an opportunity for a “fresh start” and prefer to integrate into mainstream academic life as opposed to identifying as a military veteran. These students may, in turn, have fewer opportunities to establish social support that could buffer transitional challenges (Ackerman et al., 2009); it is unclear from the existing literature how these students establish peer support on college campuses.

Inhibited help-seeking behaviors and the absence of interpersonal support has been found to negatively affect student veterans’ academic performance and well-being (Campbell & Riggs, 2015; Nyaronga & Toma, 2015), and may have more significant consequences for veterans coping with mental health issues (Kim, Thomas, Wilk, Castro,

& Hoge, 2010; Ostovary & Dapprich, 2011). For example, one study found that veterans who perceived themselves as having low levels of social support demonstrated more profound posttraumatic stress symptoms than veterans who indicated high levels of support (Nyaronga & Toma, 2015). Student veterans with PTSD have reported increased hostility and relational strain contributed to feelings of alienation on campus (Campbell & Riggs, 2015; Elliott et al., 2011). Moreover, nearly one-half of all student veterans are married and/or have dependents Cate, 2014; Cate et al., 2017). Marital discord and strained familial relations have been found to contribute to undue stress for veterans (Pew Research Center, 2011; Riviere et al., 2012), which may further contribute to social isolation and impede their academic achievement and campus engagement. Academic institutions have been encouraged to offer support for veterans who have families to address these potential barriers to their success in higher education, yet very few have reported offering such transitional assistance on their campuses (McBain, 2012). Student veterans' organizations may also provide an opportunity for student veterans to establish social support and navigate interpersonal challenges that may interfere with their academic persistence and engagement. Taken together, there exists a need for effective programming to support student veterans' development of social support to assist with their college transition.

Institutional Support. Institutional support is a critical determinant of students' college adjustment and academic outcomes (Tinto, 2016). The growing number of student veterans in higher education and extant scholarship demonstrating unique vulnerabilities within this population has underscored the importance of institutional support for student veterans on college and university campuses. In turn, there has been a

movement to develop best practice recommendations for institutions to ensure student veterans are receiving quality support in their transition to higher education. For example, The American Council on Education (2018) has established nationally recognized criteria for determining whether colleges and universities meet the recommended programming standards for being considered a “veteran-friendly” institution. Some of the Council’s criteria and recommendations, which have also been underscored in the extant literature previously reviewed, include: (a) offering staff and faculty trainings on military culture and issues relevant to working with student veterans; (b) establishing a dedicated administrative office for student veterans, comprised of staff liaisons who are knowledgeable of the challenges associated with the military-to-school transition; (c) creating military and veteran student organizations to foster peer mentorship, camaraderie, and social integration; (d) providing streamlined procedures and designated certifying personnel to manage and expedite the funding and receipt of benefits for student veterans; (e) offering military and veteran-specific orientations and transition programs to assist these students in navigating the university infrastructure; and (f) implementing policies and procedures to track student veterans’ academic progress and facilitate credit transfers (e.g., Ackerman & DiRamio, 2009; Borsari et al., 2017; Griffin & Gilbert, 2015; Hitt et al., 2015; McBain et al., 2012; O’Herrin, 2011; Persky & Oliver, 2010). Administrators and staff involved in academic advising, financial aid/tuition assistance, career services, student health, and campus activities have been encouraged to collaborate in tailoring services for student veterans by creating veteran advisory boards or steering committees (McBain et al., 2012). The Environmental Evaluation for Veterans Index (Griffin & Gilbert, 2012) provides a useful tool for institutions to utilize to evaluate

the degree to which they adhere to these recommended guidelines and provide an environment that cultivates student veteran's success and well-being on their campuses.

The availability of the aforementioned institutional resources is posited to promote student veterans' academic success and well-being. As many student veterans have reported difficulties transitioning from the hierarchical organizational structure of the military to higher education, where there may be less formal leadership or overt guidance to navigate institutional procedures, many colleges and universities have heeded recommendations to establish veteran-specific offices and campus advocates to increase the accessibility of on-campus supports (Schiavone & Gentry, 2014). The type and size of an institution may determine the availability and quality of such institutional supports for student veterans, however. For example, McBain (2012) surveyed staff and faculty from 690 academic institutions and found public colleges and universities were more likely to offer veteran-specific programming and services than private or for-profit institutions. Institutions with larger student veteran populations were also more likely to have established systemic supports consistent with the existing best practice recommendations for addressing the needs of this student group. Across institutions, the majority of respondents in McBain's (2012) study nonetheless reported a need for additional funding to support student veteran programming on their campuses as well as training opportunities for staff and faculty on veteran students' issues. Academic institutions, particularly those with low student veteran enrollment, also reported understanding and processing veteran educational benefits as the most significant barriers to providing support (McBain, 2012).

Unsurprisingly, student veterans have reported feeling unsupported by their college campuses on account of challenges navigating and utilizing institutional resources, and encountering staff members that lacked the knowledge or information necessary to provide them adequate guidance (Griffin & Gilbert, 2015). Some have reported experiencing unanticipated changes in their enrollment status or financial hardship as a result of receiving misinformation from institutional leadership or delays in processing administrative paperwork for educational benefits that impeded their academic engagement and progress (Ackerman & DiRamio, 2009). The lack of formal policies or guidance on how to facilitate credit transfers from prior academic institutions or qualified military training has also been reported as significant stressors for student veterans upon enrolling in college (Cook & Kim, 2009; Steele et al., 2010). Although colleges and universities have been advised to hire designated staff knowledgeable of veteran students' issues and to establish formal transitional assistance programs and student orientations for veterans to clarify institutional policies and procedures as well as available campus resources, some institutions may not offer such assistance (McBain, 2012). The lack of sufficient infrastructure and leadership at many postsecondary institutions may diminish student veterans' sense of control in the college transition, a factor Schlossberg proposed was necessary for successful adaptation to occur.

Implications for Universities

The reviewed literature underscores the need for supportive programs and campus climates to facilitate student veterans' successful adaptation to college life. The degree to which student minorities feel a sense of belonging and perceive their campus climates to be inclusive and supportive has been associated with their persistence in college,

academic achievement, and well-being (e.g., Hausmann et al., 2007; Hurtado, 1992; Tinto, 1993; Woodford & Kulick, 2015; Woodford, Kulick, & Atteberry, 2015).

Although scholars have yet to reach a consensus on how to best operationalize and assess campus climate (Worthington, 2008), the concept has been broadly defined as the “perceptions, attitudes, and exceptions that define an institution and its members” (Hurtado, Milem, Clayton-Pederson, & Allen, 1999, p. 2). Many factors have been theorized to influence students’ perceptions of their campus climates, some of which include the availability and quality of institutional programs, policies, and practices; attitudes among campus leadership; and interactions between students as well as between students and staff (Rankin & Reason, 2008; Simmons, Wittig, & Grant, 2010).

The association between campus climate and students’ sense of belonging appears to be significant. For example, Stebleton, Soria, and Huesman (2014) surveyed 14,550 students across six research universities and found that campus climate was an important predictor of immigrant students’ sense of belonging and engagement on campuses.

Similar findings have been reported for African American and Latino students (Greene, Marti, & McClenney, 2008; Hurtado & Ponjuan, 2005). Conversely, discrimination and overt hostility toward minority students on college campuses have been found to impede their sense of belonging, social integration, and adaptation to student life (Nora & Cabrera, 1996; Hurtado et al., 1992, 1997), and have been negatively associated with retention and graduation rates for minority students (Hausmann et al., 2007; Smedley et al., 1993; Tinto, 1993).

Thus, it is concerning that student veterans have reported feeling misunderstood and marginalized on their campuses (Ackerman et al., 2009; Hadley, 2010; Hassan et al.,

2010). Hostile or insensitive interactions with peers and faculty perceived as stereotyping veterans may further alienate student veterans (Glasser et al., 2009; Griffin & Gilbert, 2015; McBain, 2012; Weiterschan et al., 2017). Such sentiments may be due, in part, to a general lack of knowledge about the military and veteran population among civilians. For example, roughly 71% of the U.S. population has reported being unfamiliar with the military (Pew Research Center, 2011), and 61% has indicated having no prior exposure to military-affiliated individuals (U.S. Census, 2012). Given the significance of campus climate and belonging for minority students, university community members should strive to develop cultural competency on military and veteran issues (Hall, 2012; Meyer, Hall-Clark, Hamaoka, & Peterson, 2015). Developing military and veteran cultural competencies is consistent with the recommendations put forth in the American Psychological Association's *Multicultural Guidelines: An Ecological Approach to Context, Identity, and Intersectionality* (2017). The Guidelines posit, "culture *defines* (emphasis added) adaptation and maladaptation, resilience, vulnerability, and coping" (p. 71). Educators, researchers, and psychologists are encouraged to "move beyond" stereotypes and generalizations toward the development of genuine knowledge and competencies for working with marginalized cultural groups (p. 14), including student veterans. Scholars have echoed this call to action and encouraged academic institutions to initiate policies and programs that recognize student veterans as a unique cultural group and promote their academic development and resilience (Summerlot et al., 2009). Such efforts would serve to buffer any ambivalence or hostility that would make them feel unsupported or excluded on their campuses and, consequently, facilitate their integration and well-being.

To engender such inclusive environments, the American Council on Education (2018) and scholars (e.g., Cook & Kim, 2009; Hitt et al., 2015; Osborne, 2014) have recommended colleges and universities provide trainings for non-veteran staff, faculty, and students to increase their cultural competence on military and veteran issues. Many campuses, unfortunately, do not offer such trainings. In McBain's (2012) national survey of 690 college and university staff and faculty members, only 47% of respondents reported their institutions offered trainings on military and veteran issues, despite 54% indicating it was a priority and need at their institutions. Similarly, Osborne (2014) found that less than half of all academic institutions in the U.S. provided military and veteran trainings. The latter finding is concerning given the number of veteran students who have reported feeling misunderstood or marginalized on their college campuses. Among the programs that exist, and that were surveyed for the current study purposes, there are many variations in content and delivery modalities. Some colleges and universities offer time-limited, lecture-based trainings whereas others have established day-long or multi-session programs, some of which are also available online for community members to access voluntarily. To facilitate student veterans' sense of belonging and potential for success, more institutions should offer trainings on military and veteran issues to empower staff, faculty, and students with information that they can utilize to provide culturally sensitive support to student veterans. In these ideal environments, veterans would be emboldened to engage in all aspects of campus life and be less vulnerable to negative academic and health outcomes (Hall, 2012; Rumann & Hamrick, 2010; Summerlot et al., 2009).

The Current Investigation

To examine the adequacy of current efforts to support student veterans, my colleagues and I conducted a preliminary investigation from 2015 to 2017 (Weiterschan et al., 2017) at the same Southeastern university at which the current study was initiated. In this investigation, we used the Community Readiness Model (CRM; Plested et al., 2015) to evaluate the university's readiness to address the needs of student veterans on campus. The CRM was originally developed to extend Prochaska and DiClemente's (1982) transtheoretical model of behavioral change to communities. The model assumes that, much like an individual, a community's readiness to address an issue of concern to its members is a measurable predictor of the success of any local intervention aimed at addressing this issue (Edwards et al., 2000). *Readiness* is defined as the "degree to which a community is prepared to take action on an issue" (Plested, Edwards, & Jumper-Thurman, 2006, p. 3), and is comprised of six dimensions: (a) existing efforts available to address the issue of concern among community members (available efforts); (b) community knowledge of the existing efforts (knowledge of efforts); (c) leadership within the community on the issue (leadership); (d) knowledge amongst community members about the issue (knowledge of issue); (e) attitudes amongst community members about the issue (community climate); and (f) resources available to facilitate existing or future efforts (community resources; Edwards et al., 2000; Plested et al., 2015).

Consistent with the CRM's conceptual framework, the rationale for the preliminary investigation was trifold: (a) there exists a need to provide culturally sensitive supports for student veterans, (b) the university's preparedness to provide

supports for student veterans plays a critical role in determining their academic outcomes and psychosocial well-being, and (c) the university's readiness is measurable and can be assessed to determine the viability of existing resources or need for future interventions to support student veterans. The CRM manual, structured interview guide, and scoring protocol were used to guide data collection and analyses. Fifteen individual interviews with staff, faculty, and student veterans on campus were facilitated. Interview transcripts were then independently reviewed and scored to determine the university's readiness to address the needs of student veterans along the six aforementioned dimensions.

Readiness scores represent nine distinct levels of community preparedness, ranging from 1 (*no community awareness or supports related to the issue*) to 9 (*community ownership in addressing issue*). The dimension with the lowest average score represents the areas where change is most needed to enhance community readiness.

The findings from this preliminary investigation provided important insights on where interventions were most needed to increase the university's readiness to address the needs of student veterans. Specifically, we found the university was at the lowest stage of readiness along the knowledge of the issue dimension; this suggested community members had limited awareness of issues relevant to supporting student veterans on campus. Additional dimensions with low scores included knowledge of existing community efforts, community resources, and campus climate. When such knowledge disparities exist, Plested et al. (2015) recommended offering educational seminars to promote community awareness.

The current study therefore represents an extension of the previous investigation, and involved the development, administration, and evaluation of a *Green Zone* program

at the University. The study was initiated to address the limited knowledge about student veterans among campus community members and to fill gaps in the extant literature, mainly the dearth of research examining the development and effectiveness veteran-focused sensitivity trainings such as *Green Zone* on college campuses. The first *Green Zone* training was pioneered by Nichols-Casebolt at VCU. A brief overview of the program development and outcomes was published in the American College Personnel Association's online practice forum (Nichols-Casebolt, 2012); there has yet to be a peer-reviewed article published to demonstrate the rigor of the methods employed in the development or evaluation of the program, however. Osborne (2014) later published preliminary findings from a Veteran Ally training akin to *Green Zone* in a peer-reviewed journal, yet the outcomes were somewhat inconclusive and anecdotal. Nonetheless, the study provided a basis for the current "best practice" recommendations for colleges and universities to develop veteran-focused trainings for staff, faculty, and students. Such trainings have been posited to increase campus community members' knowledge of the military and veteran-related issues (Osborne, 2014) and, in turn, foster more inclusive environments for student veterans in higher education (Kirchner, 2015). To date, *Green Zone* has been implemented on over 100 college and university campuses (e.g., Texas A&M, Southern Illinois University, Brown College, Washington University), according to the VCU website. Unfortunately, no gold standard protocol exists to guide the implementation of *Green Zone* or similar veteran-focused trainings on college campuses. Institutions of higher learning have therefore adopted a strategy of designing distinct protocol for their campuses without sufficient guidance or awareness of the potential effectiveness.

To address these limitations, a community-based intervention research design incorporating mixed methods was utilized to achieve four specific aims: (a) to develop a comprehensive manual to guide the implementation of *Green Zone* at the University; (b) to administer the developed program to campus community members, (c) to evaluate and identify the need for modifications to enhance the program, and (d) to determine the effectiveness of the program for increasing participants' knowledge of the military and student veteran populations, consistent with the program content. Quantitative and qualitative data collection and analytic strategies were utilized to answer the following research questions:

1. What are the strengths and limitations of the *Green Zone* program?
2. What modifications are needed to enhance the content, organization, and delivery of the program for future administrations?
3. Is the current program effective for increasing community participants' knowledge of the military and student veterans?

Qualitative strategies included focus group interviews and the collection of written feedback, which assisted in answering the first and second research questions; these strategies were also employed to provide a more nuanced understanding of the quantitative data that was collected to address the third research question. Quantitative measures included a demographic questionnaire and knowledge assessment designed to assess participants' understanding of the military and student veterans. The knowledge assessment was administered prior to, and following, the *Green Zone* training. The analyses of the quantitative data collected from these measures was used to address five main hypotheses:

1. Participants who engage with student veterans on campus more frequently will demonstrate higher baseline knowledge assessment scores than those who engage less frequently.
2. Participants who have personal affiliations with service members and/or veterans (i.e., family members and/or acquaintances) will have higher baseline knowledge assessment scores than those without such affiliations.
3. All participants will increase their knowledge of the military and student veteran population by participating in the training.
4. Participants' demographic characteristics (i.e., university affiliation [student or staff/faculty], age, race, ethnicity, level of formal education) will not have a significant effect on their baseline and post-training knowledge of the military and student veterans, as demonstrated by their scores on the respective measures.
5. Participants who do not engage with student veterans on campus and/or have personal relationships with service members or veterans, compared with those who do, will acquire more knowledge from the training.

The study hypotheses were based on existing Safe Zone/Ally training research, which has suggested individuals' exposure information and engagement with minority groups facilitates cross-cultural learning (DeLong et al., 2011; Woodford, Kolb, Durocher-Radeka, & Javier, 2014). As the majority of civilians lack knowledge of the military and veteran populations (Kirchner, 2015; Osborne, 2014), it was anticipated participants would uniformly benefit from the training. That said, it seemed plausible that those with less prior exposure to the population would derive the greatest benefits, given the

inherent opportunities for cross-cultural learning unlikely to have been acquired previously.

CHAPTER III:

METHODS

This chapter includes four separate sections that present the research strategy for the study. In the first section, I provide an overview of the study design and methodologies. Next, I discuss the procedures for participant selection and recruitment as well as provide a comprehensive overview of the data collection methods used across three phases, which are discussed separately. I also outline the processes involved in designing the *Green Zone* program and study measures in this section. In the final section, I provide a detailed account of the procedures used to facilitate data analyses.

Study Design and Methodologies

A community-based intervention research design was selected to address the three main study objectives. The decision to utilize this design was largely based on the findings from the preliminary investigation of the university's readiness to meet the needs of student veterans on campus (Weiterschan et al., 2017). Specifically, Plested et al. (2015) suggested offering community-based educational seminars to promote awareness when there is limited knowledge of an issue. My affiliation with the university, immersion in campus life, and relationships with key stakeholders on campus positioned me as "insider." Having insider status, in turn, allowed me access and enhanced my credibility to intervene in the community.

An intervention is any action taken by a change agent to bring about a desired outcome (Cummings & Worley, 2008). In community-based intervention research, "To intervene is to enter into an ongoing system of relationship, to come between and among persons, groups, or objects for the purpose of helping them" (Argyis, 1970, p. 15). The

“action” addresses a local problem and/or serves as a catalyst for change, and the “desired outcome” is the transformation of a social ecology. The intervener seeks the “production of actionable knowledge” (Barth, 2018, p. 131), and information is gathered for the distinct purpose of clarifying whether and, in some cases, what aspects of, an intervening mechanism is successful in initiating community change. Given the current study aims were to develop and evaluate a community intervention (i.e., the *Green Zone* program) and to determine its effectiveness for initiating local change (i.e., increasing participants’ knowledge of the military and student veterans, consistent with the *Green Zone* program content), a community-based research design was determined to be most suitable.

Moreover, scholars have recommended that community-based researchers adopt methodologies as diverse as the complexities and contexts they intend to capture (Badiee, Wang, & Creswell, 2010; Campbell, Gregory, Patterson, & Bybee, 2012). Methodological pluralism allows researchers to engage in *triangulation*, or the process of examining, comparing, and contrasting unique sources of information for the purpose of understanding a phenomenon of interest with greater precision and detail (Barth, 2018; Creswell, Fetters, Plano, Clark, & Morales, 2009). The use of mixed methods, specifically, provides the advantage of reducing potential biases inherent in adopting a single approach, strengthening the validity and trustworthiness of research findings (Denzin, 1978; Fetters, Curry, & Creswell, 2013; Morrow, 2007; Roth & Fonagay, 2005). In intervention research, mixed methods can provide a richer understanding of the potential effectiveness of intervention and reduce error owing to instrumentation or lack of fidelity to intervention protocol (Johnson & Onwuegbuzie, 2004).

In the current study, a mixed-methods approach was adopted based on the recommendations in the extant literature. Thus, multiple quantitative and qualitative strategies were incorporated over three phases of data collection that took place during each *Green Zone* administration. In Phase I, participants were asked to complete a demographic questionnaire and a brief survey assessing their knowledge of the military and student veterans prior to the *Green Zone* training (hereafter referred to as the “baseline knowledge assessment”). In Phase II, participants received the *Green Zone* training and completed an in vivo evaluation that elicited their feedback on each presentation slide. Following the training, focus group interviews were conducted to gather additional feedback on training from participants. Finally, in Phase III, participants completed the knowledge assessment for the second time (hereafter referred to as the “post-training knowledge assessment”).

Qualitative methods, which are useful for capturing contextualized understandings of human behavior and experience, included focus group interviews and written feedback from participants on an in vivo evaluation. Focus group interviews were aimed at eliciting a more nuanced understanding of participants’ subjective experiences of the *Green Zone* training and potential modifications needed to enhance the program. The in vivo evaluation prompted participants to provide written feedback on each slide presented during the training, as well as to indicate the degree to which the information on each slide enhanced their knowledge of student veterans using a 5-point Likert-type rating scale. As researchers have been criticized for failing to examine the mediating mechanisms of an intervention that produce desired effects (Kazdin, 2008; Roth & Fonagay, 2005), participants were also asked to use the in vivo evaluation to highlight

specific aspects of each presentation slide that were more or less effective for promoting learning.

Procedures

Participant Selection and Recruitment

Participation in the study was entirely voluntary. The inclusion criteria for participant selection included: (a) the individual was a full- or part-time student, staff, or faculty member at the university, and (b) the individual was capable of consenting to participate in the study. Individuals currently or historically affiliated with the military were excluded from participating in the study, as they were not expected to benefit from the training given their insider knowledge of the topics. To ensure a wide range of perspectives were captured, purposeful sampling procedures were used to elicit the participation of individuals from diverse backgrounds, positions of leadership, and levels of engagement with student veterans on campus.

Prior to beginning recruitment, I consulted with a dissertation committee member who had an appointment in the Division of Student Affairs and worked closely with student veterans on campus. Over the course of several meetings, the committee member and I discussed strategies for purposefully recruiting students, staff, and faculty on campus. A decision was made to begin recruitment by targeting university entities with a known investment or strong interest in working with student veteran on campus. These included academic schools and departments with a high concentration of student veterans as well as student organizations, student development and support services, enrollment management and registration services, and undergraduate education offices that frequently engaged with student veterans on campus. In addition, the committee member

helped identify potential gatekeepers within the various entities that might assist with snowball sampling recruitment efforts.

Recruitment began in May of 2018 following Institutional Review Board (IRB) approval. Recruitment notices (see Appendix A) were distributed via email to the purposefully selected entities and individuals. Respondents were asked to set up a time to talk with me by phone or in person, depending on their preferences. During follow up communications, I reviewed with them the study purpose and procedures, the voluntary nature and extent of participation, and confidentiality. All of the individuals who responded to the recruitment emails agreed to facilitate the participation of other individuals who may benefit from the training. The gatekeepers and I maintained regular communication to facilitate scheduling. Originally, I intended to group individuals into five separate training cohorts (i.e., student organizations, academic departments/advisors, student development and support services, enrollment and registrar services, and undergraduate education services); however, this was not feasible due to scheduling barriers. Thus, a total of eight separate trainings were facilitated with students, staff, and faculty members at the university between June and October of 2018. The majority of trainings included administrators, staff, and faculty from various academic departments, student development and support services, enrollment and registration services, and undergraduate education services. Two trainings included only student participants. Additional descriptive characteristics for the study sample are provided in Chapter IV.

Some notable challenges arose during recruitment. For example, I did not anticipate there would be such an overwhelming response to the recruitment notices and had limited human resources to manage the demands of scheduling. Although the

responsiveness of community members highlighted the interest and potential need for the program at the university, gatekeepers also found it challenging to determine the scheduling needs and number of interested individuals within their entities. As such, I decided to use the SurveyMonkey platform to develop two distinct surveys to more efficiently track community interest and facilitate scheduling. The first survey contained a single item (e.g., “Please indicate the dates and times that you would be able to participate in the *Green Zone* study”) with a matrix of response options that allowed for more than one selection. The second survey also contained a single item (e.g., “Do you plan to participate in the Green Zone study on [date/time] in [location]?”) and had three response options (“Yes, I plan to participate,” “No, I do not plan to participate,” and an open-ended selection for alternative responses or comments). The first survey link was provided to gatekeepers, who disseminated it along with the recruitment email to members of their entity, to determine the dates and times that the largest number of individuals would be available to participate. After the survey responses were collected, I contacted the gatekeepers to confirm scheduling.

To facilitate the scheduling of trainings with at least five individuals, I made deliberate efforts to offer unique training dates to each gatekeeper. Because the IRB protocol did not permit collection of identifiable information on prospective participants, reminders for trainings could not be personalized. Gatekeepers were very amenable to sending email reminders to individuals they had previously contacted, yet it is likely that some potential participants did not receive the notifications and forgot about the training, and thus were lost to follow up.

It should be noted that only two individuals presented for the first training session and, after consulting with my dissertation chair, we decided to consider this session a pilot for the investigation. The information gathered during this session was not included in any of the study analyses, although their feedback proved helpful in streamlining procedures in subsequent sessions. Over the course of the study, there were three other sessions that were not facilitated due to low attendance. Those who had intended to participate in these sessions were thanked for their time, invited to attend future trainings, and provided food and beverages as well as points of contact to facilitate follow up.

Moreover, given the timing of initial data collection (i.e., close to the end of the academic term), almost all of the respondents were university administrators, staff, and faculty. Recruiting students to participate in the study was a challenge even after the start of the Fall semester, which prompted me to implement several additional strategies that included: (a) meeting with executive board representatives from various student organizations on campus; (b) developing relationships with faculty members in various departments, who agreed to disseminate recruitment notices to students or have me present information about the study during course lectures; (c) requesting and obtaining a modification to the IRB protocol to permit faculty members to offer students extra credit for participating in the study; (d) publicizing information about the study on department websites; and (e) coordinating with administrators in relevant departments to permit research credits to be awarded to student participants. Although some of these strategies were successful, scheduling restrictions imposed by the academic calendar and extracurricular events on campus further limited students' potential to participate in the study. Notably, two student trainings had no attendees. I was eventually able to recruit a

sufficient sample of students, staff, and faculty, as evidenced by the ongoing data analyses that suggested saturation of emergent themes had been achieved.

The Collaborative Research Team

Given the high demands of an intervention project, I established a collaborative research team to facilitate the collection and analyses of data. The team was comprised of two graduate students from the Mental Health Counseling Master's program who served as research assistants (RAs) on the project, and myself. Prior to beginning data collection, I met with the RAs to discuss important aspects of the study and participation on a research team (e.g., power dynamics, expectations of team members, effective communication and collaboration, strategies for addressing divergent opinions). Regularly scheduled meetings were held to facilitate the development of a strong working relationship between members of the research team and to address ongoing tasks related to the project. During these meetings, I also provided the RAs training and supervision on research ethics, methods, and data collection and analytic strategies applicable to the project. As it is imperative that qualitative researchers reflect on their positionality and aspects of their personal identities that may influence the conduct of their research and analyses (Bott, 2010; Denzin & Lincoln, 2017; Morrow, 2005), the RAs and I also engaged in reflexivity during our meetings, discussing our potential biases and subjective experiences of various developments over the course of the research process.

Data Collection Measures and Procedures

Three separate phases of data collection took place during the scheduled sessions; these are discussed in the next section. All proceedings took place in a private, accessible classroom and/or conference room on campus. At each session, participants were invited

to enter the room and select a seat of their choosing; they were informed the proceedings would begin several minutes after the designated start time to prevent potential disruptions from participants arriving late. All study participants were provided breakfast, lunch, or dinner, depending on the timing of the training, as a gesture of appreciation given the extent of their commitment. Proceeding began approximately 10 minutes after the scheduled start time in each session. A sign was placed on the door indicating research was in progress and subsequent entry was not permitted to mitigate potential disruptions. I began each session by introducing myself, providing a brief autobiography, a history of the project, and thanking participants for their interest in the study. I also provided a brief overview of the rationale and purpose of *Green Zone* trainings.

Phase I: Baseline Assessments. Participants were first provided a written consent form outlining the study objectives, extent of participation, risks and benefits of participation, and information regarding confidentiality (see Appendix B). This information was conveyed to participants verbally and displayed on a presentation slide. Participants were encouraged to ask questions to clarify any aspect of the study or consent document that was unclear to them prior to providing written consent. Attached to each consent document was a notecard with a unique identification number, which participants were asked to retain throughout the proceedings to facilitate the proper collection and subsequent analyses of their data. The consent documents did not contain identification numbers to ensure the data participants provided could not easily be traced back to them for the purposes of identification, per the IRB protocol.

After obtaining participants' written consent, the demographic questionnaire and baseline knowledge assessment were administered; a detailed description of these

measures is included in the following subsections. To facilitate the accuracy of participants' responses, I presented a slide outlining the purpose and instructions for completing the questionnaire and knowledge assessment. Participants were also encouraged to ask questions about any items that were unclear to them. Questions were resolved by providing verbal clarification to the group. Over the course of data collection, there were only two occasions where participants asked questions about items on the knowledge assessment; both questions pertained to the use of acronyms and occurred during the first training. Although the acronyms were defined on the measure, I made a decision to subsequently exclude all acronyms and use explicit terms to avoid any confusion or delays in the data collection process.

Participants were asked to signal to the RAs or myself when they had completed the questionnaire and knowledge assessment so that the materials could be collected. To ensure there were no errors in the administration process, the RAs and I ensured that the identification numbers on the questionnaire and knowledge assessment matched the notecard that had been provided to the participant. No discrepancies were observed throughout data collection. After facilitating three trainings, it became apparent that the original time allotted for completing these measures (i.e., 15 minutes) was being exceeded on account of one or two participants in each session who took longer to complete the measures than others. After consulting with my dissertation chair, I made the decision to encourage participants to complete the demographic questionnaire subsequent to the baseline knowledge assessment, and to ask participants still completing the questionnaire after 15 minutes to finish doing so during the break. There were no instances of delayed completion after instituting this approach. After participants had

returned the demographic questionnaire and baseline knowledge assessment, I provided instructions for completing an in vivo training evaluation that was part of data collection for Phase II; the instructions and evaluation are described in further detail in subsequent sections. The administration of procedures in Phase I ranged from 25 to 45 minutes, depending on the size of the group and timeliness of participants' completion of measures. Of note, it was critical that participants in separate training cohorts have comparable experiences completing the study procedures, including the *Green Zone* training, to minimize potential threats to the internal validity of the study. Participants were therefore asked to refrain from taking personal notes during all proceedings to ensure that everyone had the same experience of the training and to prevent sharing of information that might bias study outcomes.

Phase I Measures

Demographic Questionnaire. This questionnaire, which was designed for the purposes of the study, included 17 items (see Appendix C). All participants were asked to provide basic information such as their age, gender, race, and ethnicity. Students, staff, and/or faculty were asked to complete additional, unique items on the measure. Specifically, students were asked to provide information on their matriculation status, academic major, and affiliations with student organizations on campus. Staff and faculty were asked to report their occupational title and the duration of time that they served in that occupational role. The measure also includes items to assess whether participants interacted with student veterans on campus (e.g., “Do you interact with student veterans on campus?”) and the nature and extent of these interactions (e.g., “To what extent do you interact with student veterans on campus?” “In what contexts do you interact with

student veterans on campus?”). Other items asked participants to indicate whether they had familial and/or personal relationships with service members and veterans (e.g., “Do you have any immediate or extended family members who are serving in the military or who identify as a Veteran?” “Do you have any personal relationships with individuals who are serving in the military or who identify as a Veteran?”), and to clarify the nature of these relationships (e.g., parent, sibling, spouse, friend, coworker, roommate) as well as the branch of service (e.g., Air Force, Army, Marine Corps, Navy, National Guard).

Military and Veteran Knowledge Assessment. This measure consists of 22 items and assesses participants’ knowledge of the military and student veteran population (available by request from author). The items on the measure directly reflect content from the *Green Zone* manual and information that was covered during the trainings. Items cluster around three major subject domains: characteristics of student veterans (8 items), military terminology/service experiences (8 items), and service-related impairments (6 items). Sample items include “Nearly half of the student service member and veteran population is married and/or has children,” “The National Guard is a branch of the United States Armed Forces,” “Traumatic Brain Injury is the result of a penetrating head injury that severs connections within the brain.” In creating the items, I considered outcomes from my preliminary investigation, which suggested that members of the campus community (as well as civilians, more broadly) hold common misconceptions about the military and student veterans. Therefore, some of the items were designed to capture potential misconceptions that would be clarified during the training.

In designing the measure, I strived to include and evenly distribute items representing varying degrees of difficulty. For example, one of the items considered

“common knowledge” that was expected to be less challenging for participants was: “A veteran is someone who is currently serving or has served in the United States Armed Forces.” In contrast, “The Yellow Ribbon program provides 100% coverage of tuition costs for student service members and veterans at private, out-of-state colleges and universities,” represented a more challenging item that might require more advanced knowledge of the population for participants to answer correctly. Moreover, I adhered to existing survey development recommendations (e.g., Hinkin, 1998; Krosnick & Preser, 2010) in designing the measure to ensure the items used plain language that audiences with at least some high school education and English proficiency would understand, and that the items were not ambiguous, double-barreled, or leading. The dissertation committee members also reviewed the items on the measure for readability, clarity, and comprehensiveness. Dichotomous (true/false) and multiple-choice response formats were utilized. Total scores on the assessment were derived by summing the number of participants’ correct responses. As the measure was administered to participants at baseline and post-training, two total scores were derived, one for each of these time points.

Phase II: Green Zone Training and Focus Groups. The training was delivered as a PowerPoint presentation based on the Green Zone manual. Prior to the administration, I provided participants with verbal instructions for completing an in vivo evaluation. The in vivo evaluation packet contained separate pages featuring each slide from the training. The instructions for completing the evaluation were highlighted in writing on a separate presentation slide and on the first page of the evaluation. Participants were asked to complete the evaluation of each slide while that particular

slide was being presented, and to refrain from reviewing slides that had not yet been administered. To ensure the evaluations did not grossly interfere with participants' attention and engagement in the training, participants were reminded that they would have the opportunity to elaborate on their evaluations following the training. Nonetheless, feedback from participants during the pilot training suggested it would be beneficial to offer verbal prompts for participants to record their responses on the in vivo evaluations, at least initially, in order for them to become accustomed to the evaluation process. Based on this feedback, I added a brief prompt between transitions for the first few slides in subsequent administrations.

In addition, prior to beginning the training, I encouraged participants to adhere to specific conduct guidelines that included (a) refraining from recording personal notes during the training, (b) remaining seated for the full duration of the training unless there was an emergency that required their immediate departure, and (c) minimizing the use of cell phones and other potential distracting behaviors. Participants were encouraged to record notes, personal reflections, feedback, and questions that arose throughout the training on the in vivo evaluations. Participants were informed that there would be a designated question-and-answer (Q&A) segment following the training and to reserve specific questions related to the slide content for the Q&A. Each training was approximately 1-1.5 hours in length.

Subsequent to the training, I facilitated a Q&A segment, which lasted approximately 10-15 minutes. At the end of this segment, I provided participants my contact information and encouraged them to follow up with any additional questions regarding the training content or the study, more broadly. Participants were also given

specific instructions for completing the subsequent data collection procedures. A 10-15 minute break followed. In the three training sessions that included fewer than 10 participants, I independently facilitated all study procedures, including focus groups, in the same room where the training was held; in these sessions, participants were simply asked to return to the room after the break and to retain their identification number. Sessions that included 10 or more participants were divided into two separate groups to facilitate full participation from every individual and productive discussion. One group was instructed to return to the room where the training was held after the break, whereas the other was guided to a separate location for the focus group proceedings. In these sessions, the RAs co-facilitated one of the focus groups and I facilitated the other. Identification numbers were used to separate participants and ensure an equal number of participants were represented in both focus groups.

During the breaks, the RAs and I coordinated with one another ensure that the rooms were properly arranged to facilitate the focus group interviews. Tables and chairs were arranged in a semicircle, when space allowed, to enhance participation from group members and facilitate the recording of observational data. The break periods also provided the opportunity to follow up with any participants who had omitted responses on the questionnaire or baseline knowledge assessment. In addition, over the course of data collection, there were three participants who indicated that they needed to leave 10-15 minutes prior to the end of the session. These participants were asked to complete the knowledge assessment for the second time during the break, prior to participating in the focus groups. Moreover, two participants indicated they would be unable to participate in the focus groups and were similarly asked to complete the final survey and submit the in

vivo evaluation prior to their departure. The RAs and I were mindful not to engage in conversations with participants during breaks unless pertinent to the study procedures to avoid biasing subsequent data collection.

Prior to beginning the focus groups, and to minimize any social desirability, the focus group facilitators provided a general statement regarding the critical role of each participant in ensuring the study aims were achieved. A presentation slide outlining the objectives of the focus group interviews and appropriate conduct (e.g., create space for others to provide feedback and avoid cross talk; differences of opinion are anticipated, appreciated, and should be navigated respectfully; be considerate of one another's confidentiality outside of the group context) was also reviewed. Participants were encouraged to reference their in vivo evaluation packet during the focus group interviews; the evaluations were collected immediately following the training and prior to Phase III of data collection. Throughout the focus group proceedings, the facilitators documented potentially relevant observations such as body language, non-verbal gestures, group conflict and coalition building, and variations in engagement or verbal participation. All focus group sessions were audio-recorded using two separate recording devices, and participants were encouraged to speak clearly and in the direction of devices to facilitate quality recordings. Focus groups ranged from 30 to 50 minutes in length. A total of 10 focus groups were conducted.

As neither of the RAs had previous experience conducting focus groups, I facilitated several meetings with them prior to the start of data collection to provide training and supervision. During the meetings, we reviewed book chapters and articles on conducting mixed methods research and focus groups, (e.g., Creswell, Fetters, Plano

Clark, & Morales, 2009; Vivino, Thompson, & Hill, 2012; Weiss, 1994), discussed the focus group interview guide and protocol, and engaged in mock focus group sessions. I also prepared a detailed script for the proceedings that the RAs were encouraged to review prior to conducting the focus groups. The script included quick tips on how to address dominant voices, engage less vocal participants, redirect discussion unrelated to focal topics, and intervene when participants interrupt one another or engage in disruptive interpersonal conflicts, for example. The RAs also observed me facilitating a focus group session prior to facilitating their own. In addition, I reviewed the audio-recordings from the first focus group session that the RAs had co-facilitated together, provided written and verbal feedback, and answered any questions that they had to ensure proper collection of data. The RAs and I also met to debrief following every session, discussing our subjective experiences and impressions on the study proceedings.

Phase II Measures.

The Green Zone Training. The *Green Zone* training that was developed for the University followed the design of the VCU program. A comprehensive manual and accompanying PowerPoint presentation were developed. Similar to the VCU program, a time-limited, lecture-style presentation format with opportunity for group discussion was adopted. To develop the current program, I conducted an exhaustive review of the extant research focused on student veterans. I also examined the substantive resources I had acquired through various educational and professional development activities through my affiliations with the Student Veterans of America, Veterans Health Administration, Veterans Benefits Administration, Center for Deployment Psychology, and Division 19 of the American Psychological Association (i.e., Society for Military Psychology). In

addition, I reviewed content from accredited sources and national databases (e.g., American Council on Education veteran reports, National Center for Veterans Analysis and Statistics, National Center for Posttraumatic Stress Disorder) that host information on student veterans. I also examined the outcomes from my previous investigation as well as information I received from members of the university administration involved in veterans' affairs on campus. Finally, I consulted with other universities implementing *Green Zone* or similar training programs (e.g., University of North Carolina, University of Texas, Virginia Commonwealth University) and reviewed materials available for LGBTQ Ally and other Safe Zone trainings, to acquire additional insights, guidance, and resources to assist in developing the program.

Based on these resources, I gathered that existing programs have common characteristics that include: (a) the objective of promoting student veterans' success and well-being on their college or university campus, and (b) educating selected campus audiences on a broad range of topics relevant to understanding the populations' needs and providing culturally sensitive support. In general, content areas include military history, terminology, and experiences; the cycle of deployment; the civilian-to-student transition; mental health and suicide prevention; "best practices" for providing support; and community resources. Thus, in designing the Manual, I selected content representative of these subject areas and incorporated additional information that would be particularly relevant or meaningful for the university community. Per recommendations from individuals I consulted at other universities and Osborne (2014), I was mindful to include content that would dispel potential misconceptions or stereotypes about the military or student veterans; highlight the strengths and successes of student veterans; and capture

the voices and experiences of student veterans on campus, which I had gathered during my previous investigation and immersive engagements with the veteran student organization on campus.

The resulting *Green Zone* manual was used to guide the development of a PowerPoint presentation to facilitate the delivery of content to training audiences. To maximize the potential effectiveness of the presentation, I adhered to recommendations provided by staff members at other universities implementing *Green Zone*. These included: (a) integrating statistics and other information on the student veteran population; (b) inviting student veterans to serve as co-facilitators and provide testimonials of their service, military-to-student transition, and campus experiences; and (c) offering a Q&A segment following trainings to elicit questions and feedback from audience members. I consulted and collaborated with student veterans affiliated with the Student Veterans Organization on campus in designing the training. The veterans provided valuable feedback and two agreed to serve as co-facilitators for the trainings.

Following IRB approval for the study, I reached out to the student veterans who had agreed to serve as co-facilitators. They were provided a copy of the study materials and asked to review them prior to an initial meeting that had been scheduled. Unfortunately, one of the intended co-facilitators encountered an unexpected unrelated issue and was unable to participate in the trainings; this individual nonetheless provided valuable feedback on the study materials. The other co-facilitator met with me on numerous occasions to review and discuss the study protocol and training materials, to prepare and refine their personal contributions that would be incorporated into the training, and to engage in mock training sessions. However, 2 weeks before the first

training was scheduled to take place, the co-facilitator accepted a job offer that would require them to commit to an inflexible work schedule and, thus, was unable to continue engaging with the study. With limited time before the first scheduled training, I engaged in many efforts to secure an alternative veteran co-facilitator but was unable to do so. As I felt it was important to capture the perspectives of student veterans from the community, I subsequently coordinated with two individuals who offered to prepare video recordings to be featured in the presentation. However, the number of technological issues we encountered while formatting and editing the videos ultimately precluded me from incorporating them into the training prior to the first scheduled session. It was also not feasible to include veteran student co-facilitators or videos after the first session, given the need to ensure trainings were conducted consistently across sessions. Thus, to capture and facilitate deeper understanding of student veterans' experiences, I facilitated guided imagery exercises and brief group discussions. The guided imagery exercises included a brief description of a scenario a service member would likely experience (e.g., deploying to Afghanistan, returning home from deployment) and a prompt for audience members to imagine what the experience might elicit for the service member; participants were asked to share their reflections. In addition, I asked the audience specific questions during the training (e.g., What strengths might student veterans have to promote their adjustment to college life? What challenges might student veterans encounter? What questions might you ask a veteran student to get to know them better?). My goal in asking these questions was to facilitate brief group discussions and promote engagement, learning, and empathy building. I also incorporated the findings from my preliminary

study into the training, as well as anecdotal information from many informal conversations I held with veterans on campus prior to this study.

In-vivo Training Evaluation. A semi-structured evaluation was developed to gather participants' feedback on *Green Zone* during the administration of the training (available by request from the author). Specifically, the evaluation was used to obtain feedback regarding (a) the suitability of the design and formatting of the content, and (b) the effectiveness of the material presented for enhancing knowledge of student veterans. The evaluation was comprised of 18 pages, each featuring a color image of a slide in the presentation; the pages were ordered sequentially in the order slides were presented. Two presentation slides are not featured on the evaluation, as they contain only images; participants were alerted to this during the verbal instructions for completing the evaluation. I made a decision to exclude these images from the evaluation given one contained photographs of student veterans on campus and the other was only briefly featured to indicate a topic transition. In addition, each page in the evaluation included a prompt (i.e., "To what degree does the information on this slide, and presented verbally, enhance your knowledge of student service members and/or veterans?") and a Likert-type response scale ranging from 1 to 5 (1 = *Not at all*, 2 = *Slightly*, 3 = *Moderately*, 4 = *Very*, 5 = *Extremely*). A section for notes was also featured on each page. Participants were prompted to write down questions and feedback in this section during the instruction period. In addition, participants were provided a pen and highlighter and asked to use these materials to indicate any aspects of the presented slides that were unclear to them.

Focus Group Interview Guide. A semi-structured interview guide was developed to facilitate focus group interviews that elicited participants' feedback on the content,

organization, delivery, and effectiveness of the training (see Appendix D). Specifically, the question prompts were designed to gather information that would be helpful to determine (a) the quality and relevance of the material provided in the training, and (b) the need for modifications to the program and corresponding manual. The interview guide was prepared in accordance to recommendations from Strauss and Corbin (1998) such that the questions were open ended and follow-up probes were used to extend and deepen the dialogue.

Phase III. Post-Training Assessment. Immediately following the focus group interviews, participants were provided brief instructions for completing the knowledge assessment for the second time. After participants completed and returned the measure, facilitators briefly reviewed the content to ensure all items had been answered. Participants were again thanked for their time and reminded that they could follow up with me if they had any additional feedback or questions. The slide containing my contact information (previously described) was featured during this final segment.

Data Analyses

Consistent with the IRB protocol, data were stored and handled in accordance with guidelines for the ethical maintenance and analysis of research data (e.g., storing consent forms and surveys in separate locations under lock-and-key and ensuring cabinets containing the data remained locked at all times; downloading audio-recordings onto a dual password-protected computer and removing them from recording devices immediately following each data collection session; analyzing data in a private location where potential observers were not present). The following sections outline the specific procedures for the data analyses.

Quantitative Data. All quantitative data from the demographic questionnaires, knowledge assessments, and in vivo evaluations were entered into an SPSS dataset. The RAs and I met on multiple occasions to review the procedures for data entry. To ensure the accuracy of the data, each team member reviewed and entered data separately, maintaining distinct database files. After the separate duplicate database files were completed, data were compared, and discrepancies were resolved by reviewing the raw data and reentering the correct information into a master file.

A variety of statistical procedures, which are described more thoroughly in Chapter IV, were performed to test the five main study hypotheses:

1. Participants who engage with student veterans on campus more frequently will demonstrate higher baseline knowledge assessment scores than those who engage less frequently.
2. Participants who have personal affiliations with service members and/or veterans (i.e., family members and/or acquaintances) will have higher baseline knowledge assessment scores than those without such affiliations.
3. All participants will increase their knowledge of the military and student veteran population by participating in the training.
4. Participants' demographic characteristics (i.e., university affiliation [student or staff/faculty], age, race, ethnicity, level of formal education) will not have a significant effect on their baseline and post-training knowledge of the military and student veterans, as demonstrated by their scores on the respective measures.
5. Participants who do not engage with student veterans on campus and/or have personal relationships with service members or veterans, compared with those

who do, will acquire more knowledge from the training.

The first and second hypotheses were largely based on the theoretical framework and guiding principles of LGBTQ Safe Zone/Ally programs, upon which *Green Zone* was originally modeled. The guiding principles suggest cross-cultural learning occurs when individuals from different backgrounds (a) come into contact with one another and engage in interpersonal dialogue, (b) develop an awareness of language and concepts relative to understanding one another, and (c) confront personal and societal biases that impede connection (DeLong et al., 2011; Woodford et al., 2014). As such, it was predicted that participants with some exposure to service members and veterans would have opportunities for cross-cultural learning that would increase their knowledge of the population and, in turn, their scores on the baseline assessment. In contrast, it was assumed that participants reporting no such exposures would have fewer cross-cultural learning opportunities to promote their acquisition of knowledge and, thus, would demonstrate lower scores on the baseline assessment.

Moreover, existing research has demonstrated the efficacy of psychoeducational interventions for increasing awareness and knowledge of LGBTQ+ students (Finkel et al., 2003; Poynter & Tubbs, 2008), international students (Zuniga, 2007), and even student veterans (Selber et al., 2015), underscoring the potential for *Green Zone* to contribute to meaningful changes in participants' knowledge of the military and student veterans. It was therefore assumed that all participants would demonstrate increased knowledge of the population as a result of participating in the training, consistent with Hypothesis 3. In addition, given the limited knowledge regarding the military and veterans among civilians (e.g., Kirchner, 2015; Osborne, 2014), it was assumed that

participants' personal characteristics would not be a salient predictor of their baseline knowledge and that these factors would not influence the potential for learning, as demonstrated by scores on the post-training knowledge assessment (Hypothesis 4).

Finally, considering the research identifying factors that promote cross-cultural learning, it seemed plausible that individuals with limited exposure to military-affiliated individuals, whether on campus or through their personal relationships, would benefit most from the training. Specifically, it was assumed that participants with less exposure would gain more knowledge from the training given the novel opportunity to develop awareness of relevant concepts and to confront biases about veterans, which individuals with greater exposure would plausibly be more likely to have already acquired or addressed through their personal engagements with veterans (Hypothesis 5).

The specific analyses that were performed to test each of the study hypotheses are described in detail in Chapter V. It is important to note that despite the efforts taken to protect against missing data (i.e., reviewing collected data during training sessions to ensure there were no omitted responses and resolving any such instances with participants), such occurrences existed. Given that the proportion of missing data influences the quality of statistical inferences (Parent, 2013), I adopted a maximum threshold approach in the analyses of quantitative data, as opposed to maximum likelihood estimation, per recommendations from consulting statisticians and the existing scholarship. Although no established thresholds exist, some scholars have suggested between 5% and 10% of missing data is likely to be inconsequential with moderate sample sizes and a sufficient number of items used to generate imputations (Parent, 2013). As there was less than 5% missing data in the study, it was assumed that the

statistical analyses that were performed would not be significantly impeded. In addition, the few missing entries that were observed were removed casewise, which, although unlikely, might have contributed to a loss of power.

Qualitative Data. Several strategies were utilized to analyze the qualitative data in the current study. First, a thematic analysis of the focus group interviews was conducted. Thematic analyses are aimed at identifying, analyzing, and reporting on patterns of information or “themes” within qualitative data. As variable strategies can be utilized to conduct such analyses, Braun & Clarke (2006) recommended researchers clarify the specific paradigm from which they are operating, and the nature and intent of their analytic coding procedures. In the current study, the analysis of qualitative data followed from an essentialist or realist paradigm. A theoretical approach, which is often driven by researcher’s analytic interest in a particular aspect of the data (Braun & Clark, 2006), was adopted with two main objectives: (a) to understand participants’ experiences during the training, and (b) to identify potential modifications that would enhance the *Green Zone* program. As such, focus group interviews were analyzed and coded to capture participants’ explicit reflections on their experiences and feedback on the training to arrive at overarching themes. In vivo evaluations were also coded and compared with the data derived from focus groups. To ensure the trustworthiness, dependability, and confirmability of the findings from these analyses, several steps were taken, such as prolonged immersion of the research team members in the local field of data collection, cross-checking and triangulation of data, maintaining an audit trail and code-recode strategy, peer debriefing, persistent observation of participants, and thick descriptions of the study procedures and findings. These strategies are consistent with existing

recommendations for qualitative researchers (Denzin & Lincoln, 2017; Morrow, 2005; Shenton, 2004).

To facilitate the thematic analysis, focus group interviews were first transcribed and then cross-checked for accuracy by members of the research team. As the RAs were not experienced in transcribing interviews, I created a comprehensive guide outlining ethical considerations and procedures involved in the transcription process and provided relevant supplementary readings. The guidelines for transcribing the interview data included: (a) capturing verbal feedback from participants that corresponded to the question prompts on the interview guide, and (b) documenting potentially valuable discussions that were not directly related to the study purposes that could assist in the identification of future areas of inquiry (e.g., strategies that could enhance the quality of services and supports provided by a specific unit on campus). Given the nature of the data sought, verbal fillers, long pauses in discussion, and other information were not included in the transcriptions. The team met regularly throughout the transcription process to address any questions or concerns about the information to be included in transcripts and to discuss preliminary impressions and insights on the data.

Cross-checking transcriptions and ongoing consultation among members of the research team involved in this process was intended to safeguard the integrity of subsequent analyses and research findings, per existing recommendations from scholars (Denzin & Lincoln, 2017; Morrow, 2004; Shenton, 2004). In addition, focus group interviews facilitated by the RAs were transcribed by me, whereas interviews that I conducted were transcribed by the RAs. This approach was adopted to further maximize the accuracy of the transcriptions by mitigating potential biases or oversights owing to

impression management, and to ensure that all members of the research team were familiar with the data collected over the course of the study. After all transcriptions were complete, the RAs and I individually reviewed the transcripts that we had not initially transcribed to ensure there were no discrepancies in the information that had been recorded. Instructions for the verification process were to crosscheck the audio-recordings with the transcripts and revise any observed discrepancies.

To guide the initial analysis of focus group transcripts, I constructed a preliminary thematic coding scheme that included nine major codes corresponding to the prompts on the focus group interview guide. One of the RAs and I separately coded all of the transcripts and met on multiple occasions to establish consensus on the codes that best fit the data and to resolve any coding discrepancies through discussion and reflection. We also discussed the suitability of the coding scheme for the data and made refinements based on our impressions. Specifically, we identified a great deal of overlap between three of the codes, which related to feedback on the training content, organization, and delivery, respectively. Thus, we decided to collapse these into a primary code and retain separate sub-codes for the respective feedback. The final coding scheme had five main codes and was used to analyze all of the focus group transcripts. Once all of the focus group transcripts had been coded, I prepared a written document outlining each major theme and corresponding participant data coded in each transcript. This document was not only helpful in organizing the data but also cross-checking the analysis to ensure that each theme reflected feedback from participants across the majority (i.e., more than half) of focus groups conducted. In addition, I maintained a thorough audit trail and reflexivity journal throughout the data collection and analysis procedures to further enhance the

confirmability of the study findings (Nowell, Norris, White, & Moules, 2017). The RAs maintained similar personal records as well.

Following the thematic analyses of focus group interviews, I conducted a careful review of participants' written feedback on the in vivo evaluations. Any comments, edits, and highlights that were recorded were transferred to a Word document that I created to track and synthesize participants' feedback on each training slide featured in the evaluation. In the process of reviewing the evaluations, I noted many similarities across participants' feedback on the slides and, thus, made efforts to quantify the number of congruent impressions. I also noted divergent or extreme perspectives. The analysis of the in vivo evaluations was conducted to enrich the interpretations of the focus group interview data. Triangulation of data enhances the trustworthiness and credibility of qualitative research findings (Denzin & Lincoln, 2017; Morrow, 2005). Feedback from the in vivo evaluations was consistent with, and integrated into, the interpretation of the qualitative findings from the focus group interviews outlined in Chapter V.

CHAPTER IV:

RESULTS

This chapter presents the results from the quantitative and qualitative analyses of collected data. The characteristics of the study sample and descriptive statistics are provided first. Results from the statistical analyses performed to test the main hypothesis are subsequently presented. Finally, the major qualitative themes derived from focus group proceedings as well as feedback provided through in vivo evaluations are described.

Participants

A total of 89 individuals participated in the *Green Zone* training. Of these, two participants were excluded from the final sample given their involvement in a pilot administration of the training. Further, three participants were excluded because they identified as veterans on the demographic questionnaire. Two other participants provided insufficient data for the purpose of the analyses as they encountered emergent situations during the proceedings that required their immediate departure. Among the final sample of 82 participants, 60 were staff and/or faculty (hereafter referred to as “staff/faculty”) and 22 were students at the university. Six participants that identified as both a staff member and a student were included in the student sample. This decision was made based on the assumption that students, in contrast to staff/faculty, have unique opportunities to engage with veterans in classroom and extracurricular settings. Nearly half of the participants were between ages 25 and 44 ($n = 38$; 48.1%), and there was an equal representation of individuals between ages 18 and 24 ($n = 20$, 24.4%) and ages 45 and 64 ($n = 20$, 24.4% for each group). One participant was over the age of 65, and three

declined to answer this item on questionnaire. Additional demographic information on the study participants is included in Table 1.

Notably, there was an overrepresentation of female and non-Latino/a participants in the sample, which is consistent with the slightly higher proportion of women and non-Latino Whites enrolled and/or employed at the university (Office of Planning for Intuitional Research and Assessment, 2019). Participants also differed in terms of their level of formal education. For example, staff/faculty were most likely to have obtained a graduate degree, whereas students comprised the majority of the subsample that reported completing only some college. Among staff/faculty, 43 (52.4%) reported having 1-5 years of experience in their current occupational role, nine (11.0%) had over 10 years of experience, eight (9.8%) had between 5-10 years of experience, and six had less than one year of experience (7.3%). Almost all of the study participants indicated that they were not affiliated with a veteran student organization on campus ($n = 79$, 96.3%).

Main Hypothesis Tests

Participant data from the demographic questionnaire as well as baseline and post-training knowledge assessments were analyzed using SPSS. Data from 80 participants were included in these analyses. Two individuals were excluded from the analyses, as they were unable to complete one or both of the knowledge assessments due to emergent issues that required their immediate departure from study sessions. Although these individuals were included in the descriptive analyses, they did not provide sufficient data to be incorporated into subsequent analyses of quantitative or qualitative data. The statistical procedures used to examine each hypothesis are reviewed in the following subsections. Of note, there were some instances where a disparate number of participants

were represented in each level of an IV being examined, yielding insufficient cell sizes for conducting parametric tests in certain analyses. Based on recommendations in the literature and from consulting statisticians, non-parametric tests were conducted in instances where cells contained fewer than 10 cases.

Hypothesis I. Participants who engage with student veterans on campus more frequently will demonstrate higher scores on the baseline knowledge assessment than those who reportedly engage less frequently. Baseline knowledge assessment scores served as the dependent variable (DV; continuous) whereas participants' level of engagement with student veterans on campus served as the independent variable (IV; categorical). Five separate levels represented participants' degree of interaction with student veterans; these included *Do Not Interact*, *Rarely*, *Sometimes Interact*, *Often Interact*, and *I'm Not Sure*.

Based on recommendations for performing statistical analyses with small samples sizes and significant departures from heterogeneity (Van Hecke, 2012; VanVoorhis & Morgan, 2007), I performed a non-parametric Kruskal-Wallis test, which is considered robust with non-normal distributions (Lantz, 2012). The test was used to examine whether responses were significantly different for participants depending on whether they did not interact ($n = 12$, $M = 9.17$, $SD = 3.21$), rarely interacted ($n = 28$, $M = 10.57$, $SD = 1.81$), sometimes interacted ($n = 13$, $M = 11.54$, $SD = 2.37$), often interacted ($n = 5$, $M = 12.80$, $SD = 2.05$), or were not sure whether they interacted ($n = 22$, $M = 10.59$, $SD = 2.06$) with student veterans on campus. The test did not yield statistically significant results, $\chi^2(4) = 7.48$, $p = .113$. Thus, the assumption that the frequency of participants'

interactions with student veterans would influence baseline knowledge assessment scores could not be substantiated.

Hypothesis II. Participants who have personal affiliations (i.e., family members and/or acquaintances such as colleagues, peers, friends, roommates) with service members and/or veterans will demonstrate higher scores on the baseline knowledge than participants without such affiliations. Again, the baseline knowledge scores served as the DV (continuous) and the IV represented participants' personal affiliations (categorical). Levels of the IV were determined by grouping individuals into four separate categories based on their reported personal affiliations. The levels included *No Affiliations*, *Only Family Members*, *Only Acquaintances*, and *Both Family Members and Acquaintances*. The frequency statistics demonstrated the distribution of participants across levels of the variable was not sufficient to conduct a one-way ANOVA. Therefore, the Kruskal-Wallis test was used to test this hypothesis as well. Differences in baseline knowledge scores across participants with no affiliations ($n = 13$, $M = 9.85$, $SD = 3.39$), with only family affiliations ($n = 14$, $M = 10.71$, $SD = 2.52$), with only acquaintances ($n = 17$, $M = 10.53$, $SD = 2.07$), and with both family members and acquaintances ($n = 36$, $M = 11.00$, $SD = 1.96$) did not differ significantly, $\chi^2(2) = .61$, $p = .738$. The hypothesis that participants' baseline knowledge would differ depending on their personal affiliations with service members and/or veterans was, therefore, not substantiated.

Hypothesis III. Participants' scores on the post-training knowledge assessment would be significantly higher than scores on the baseline assessment (i.e., all participants will demonstrate gains in knowledge). To test this hypothesis, a paired-samples t -test was performed. The DV included the knowledge scores at baseline

and post-training; the timing of administration represented the IV in the analyses. A statistically significant mean difference between participants' ($N = 80$) baseline ($M = 10.67$, $SD = 2.35$) and post-training ($M = 16.78$, $SD = 2.30$) scores was observed, $t(79) = -19.45$, $p = .000$. On average, participants' post-training scores were 6.11 points higher than their baseline scores (95% CI [5.49, 6.74]). Figure 1 displays the changes in mean scores on the knowledge assessment for students ($n = 22$) and staff/faculty ($n = 58$).

Hypothesis IV. Participants' demographic characteristics will not have a significant effect on their baseline and post-training knowledge of the military and student veterans. The demographic characteristics of interest were participants' university affiliation (i.e., students vs. staff/faculty), age, race, ethnicity, and level of formal education. A series of one-way ANOVAs were conducted to examine differences in participants' baseline knowledge scores across demographic factors. The baseline knowledge scores represented the DV, and the demographic variables were categorical IVs.

The first one-way ANOVA was conducted to examine mean differences in knowledge scores between students ($n = 22$, $M = 9.23$, $SD = .47$) and staff/faculty ($n = 58$, $M = 11.21$, $SD = .29$) on the baseline assessment. Using Bonferroni correction, the results of the one-way ANOVA revealed baseline knowledge assessment scores differed significantly based on participants' affiliation, $F(1, 78) = 13.06$, $p = .001$, partial $\eta^2 = .14$). The assumption of homogeneity using Levene's test was met for this analysis. Based on the findings from this analysis, staff/faculty, on average, had more baseline knowledge of the military and student veterans than students.

A second one-way ANOVA was conducted to examine age differences in

baseline knowledge scores. Age was recoded to represent three distinct categories of approximately equal size. These included *18-24 year-olds*, *25-44 year-olds*, and *45-65 year-olds*. Three individuals omitted their age on the demographic questionnaire; thus, 77 participants were included in this analysis. A one-way ANOVA was conducted to examine differences across participants' ages 18-24 ($n = 20$, $M = 8.75$, $SD = 2.38$), ages 25-44 ($n = 38$, $M = 11.34$, $SD = 1.83$), and ages 45-65 ($n = 19$, $M = 11.32$, $SD = 2.36$). Results of the one-way ANOVA were significant, $F(2, 74) = 10.99$, $p < .001$, partial $\eta^2 = .23$. Statistically different mean scores on the baseline assessment were observed for participants ages 18-24 and ages 25-44, as well as between participants ages 18-24 and ages 45-65. These findings suggest that, on average, participants under the age of 25 had lower baseline knowledge than individuals who were 25 and older.

A third one-way ANOVA was conducted to examine differences in baseline scores according to participants' educational levels. Educational level was represented as three distinct categories, which included *Some College Education*, *College Degree*, and *Graduate Degree*. The category *Some Graduate Education* was not included due to the small cell size ($n = 4$). Descriptive statistics indicated there was a wide range of representation of participants across educational levels; participants had some college education ($n = 19$, $M = 9.16$, $SD = 2.73$), a college degree ($n = 14$, $M = 10.50$, $SD = 2.24$), and a graduate degree ($n = 42$, $M = 11.45$, $SD = 1.94$). One individual who reported that they had a high school diploma and no formal college education was deemed an outlier and was subsequently removed from the analyses. Results revealed statistically significant mean differences in baseline scores as a function of participants' level of education using the Bonferroni corrected alpha, $F(3, 75) = 5.27$, $p = .002$, $\eta^2 = .17$.

Levene's test of homogeneity was also met. Post-hoc analyses demonstrated mean scores on the baseline assessment were significantly different for participants with some college education and with a graduate degree ($M_{diff} = -2.29$, $SE = .60$, $p < .05$). Thus, the assumption that baseline knowledge scores would not differ based on participants' level of education was not substantiated. Specifically, participants with a graduate degree demonstrated higher baseline knowledge of the population, on average, compared with participants with only some college education.

Results of the remaining one-way ANOVA tests examining differences in baseline knowledge scores depending on participants' gender, ethnicity, and race were non-significant. Specifically, the one-way ANOVA test examining differences in baseline scores depending on participants' gender were not significant using the Bonferroni corrected alpha, $F(1, 76) = 2.16$, $p = .146$, $\eta^2 = .03$. Gender was represented by two separate categories, *men* ($n = 23$, $M = 11.21$, $SD = 2.15$) and *women* ($n = 55$, $M = 10.36$, $SD = 2.41$). One participant reported their gender as "Other" and one participant declined to answer this item on the demographic questionnaire; these cases were removed and, thus, 78 participants were represented in this analysis. Moreover, ethnicity, which was recoded into two distinct categories that included *non-Latino/a* ($n = 52$, $M = 10.48$, $SD = 2.36$) and *Latino/a* ($n = 22$, $M = 11.09$, $SD = 2.09$), was similarly found to yield a non-significant mean difference in participants' baseline scores, $F(1, 72) = 1.10$, $p = .298$, $\eta^2 = .02$. Six individuals were not included in this analysis as they did not report their ethnicity on the demographic questionnaire. Thus, only 74 participants were included in this analysis.

Regarding the one-way ANOVA used to examine whether participants' baseline

knowledge scores (DV) differed depending on their race (IV), significant variations in group sizes were observed across the five categories representing the IV (i.e., White, Black, Asian, Native American/Alaskan Native, and Other/Mixed Race). Given there were fewer than seven participants represented in the Asian, Alaskan Native/Native American, and Other/Mixed race categories, I decided to recode the data into four categories. The four racial categories included White, Black, Asian, and Other/Mixed race participants; one Native American/Alaskan Native participant was included in the Other/Mixed race category. A Kruskal-Wallis test was conducted to examine the differences across White ($n = 56$, $M = 10.98$, $SD = 2.08$), Black ($n = 12$, $M = 10.00$, $SD = 1.35$), Asian ($n = 4$, $M = 9.50$, $SD = 5.07$), and Other ($n = 5$, $M = 8.20$, $SD = 2.68$) participants. Results of the test revealed that baseline scores did not differ, $\chi^2(3) = 6.88$, $p = .076$. Thus, the expectation that participants' race would not contribute to significant differences in baseline knowledge was satisfied, partially supporting the fourth hypothesis.

In addition, a bivariate correlation analysis was performed and revealed a moderate, positive correlation between baseline and post-training knowledge scores ($r = .27$, $p = .015$). Thus, separate ANCOVAs were conducted to examine whether post-training scores (DV) differed based on participants' demographic characteristics (IV), holding baseline knowledge assessment scores constant (covariate). For each IV, I used the same levels and handled issues with small cell sizes in the same way that I did in the previous analyses. Separate ANCOVAs were conducted only for IVs that showed adequate cell sizes for the analyses (i.e., age, gender, ethnicity). Results revealed there were no statistically significant mean differences in post-training scores for any of the

variables. The findings suggest that, on average, the training contributed to increased knowledge of the population across diverse groups of participants.

Hypothesis V. Participants who do not engage with student veterans on campus and/or have personal relationships with service members and/or veterans, compared with those who do, will acquire more knowledge from the training.

Given that the sample size precluded statistical analyses of change scores using a two-way repeated measures ANCOVA, separate non-parametric Kruskal-Wallis tests were conducted to examine differences in change scores (i.e., post-training scores minus baseline scores) for the two conditions. Results of the first test revealed that change scores did not differ significantly based on whether participants did not interact ($n = 12$, $M = 15.08$, $SD = 3.15$), rarely interacted ($n = 28$, $M = 17.14$, $SD = 1.80$), sometimes interacted ($n = 13$, $M = 16.85$, $SD = 2.51$), often interacted ($n = 5$, $M = 16.40$, $SD = 2.70$), or were not sure if they interacted ($n = 22$, $M = 17.27$, $SD = 1.88$) with student veterans on campus, $\chi^2(4) = 3.74$, $p = .443$. The second Kruskal-Wallis test examined differences in change scores across participants who had no personal affiliations ($n = 13$, $M = 15.85$, $SD = 2.79$), only family affiliations ($n = 14$, $M = 17.43$, $SD = 2.21$), only acquaintance affiliations ($n = 17$, $M = 16.24$, $SD = 2.31$), and both family and acquaintance affiliations ($n = 36$, $M = 17.11$, $SD = 2.08$) with service members and/or veterans. The test also yielded non-significant findings, $\chi^2(3) = 1.58$, $p = .664$. The median change score for both analyses was 6.00. Thus, no differences in change scores were found depending on participants' level of engagement with student veterans or personal relationships with service members and/or veterans. The fifth hypothesis was not supported.

Impressions and Feedback on Green Zone

The results reported in this section were derived from the thematic analysis of focus group interviews and systematic review of feedback on the in vivo evaluations. None of the study participants reported any barriers to providing feedback during focus group sessions. In addition, participants reportedly perceived the in vivo evaluations to be “straightforward” and minimally distracting such that they did not grossly interfere with learning or engagement. As such, the major themes identified and discussed are considered a fairly accurate reflection of the shared experiences and common feedback from participants across training cohorts.

Major Themes. Five major themes were identified during the initial analyses of focus group interview transcripts: (a) Strengths (i.e., participants’ positive impressions of the training); (b) Areas for Improvement (i.e., participants’ perceptions of the trainings’ limitations or ways in which the training could be enhanced); (c) Knowledge Gained (i.e., participants’ descriptions of knowledge they acquired from the training and major “take aways”); (d) Knowledge Utilization (i.e., participants’ impressions on how they foresee utilizing the information that they acquired during the training); and, (e) Ratings (i.e., participants’ experience of completing the in vivo evaluations during the training and references to attentional interference/distraction). Knowledge Utilization and Knowledge Gained were later subsumed into one major theme, Knowledge Enhancement and Value, given the thematic overlap that was observed. In addition, Ratings was not considered directly relevant to the main objective of the analysis, which was to identify potential modifications needed to enhance the training. Thus, three major themes are explicitly described in the following subsections: Strengths, Areas for Improvement, and

Knowledge Enhancement and Value. References to the responses from participants such as “many,” “most,” and “some” reflect responses from participants in both the focus group sessions and the in vivo evaluations.

Strengths. This theme encompasses participants’ broad impressions on the strengths of the training. In general, participants perceived the “basic training” on military terminology and culture to be an important component of the training in that it established a foundation for subsequent learning. Even participants who believed they had adequate baseline knowledge of the military reported learning new insights from this segment of the training, “I think maybe 90% [of people] probably have no idea about the military, some [participants] probably had no clue. So I think, even if you had some knowledge, but especially if you had none at all, it would be good to recap.” Additional content areas that participants perceived as being particularly helpful included (a) student veterans’ performance and success in higher education, (b) information that student veterans want community members to know (i.e., dispelling stereotypes), and (c) how to ease student veterans’ transition to higher education. Participants reflected that the information presented in these content areas helped increase their awareness of service members’ lived experiences, understand distinctions between military and academic cultures that may present challenges for student veterans, and learn about the unique characteristics and strengths of student veterans. Participants also reported the content in these areas helped dispel misconceptions or biases they held prior to the training, “I think this information is very helpful for us to know because there is a stigma around student veterans, [and to know] that it is the opposite... that they are not unlikely to persist and things like that... is really relevant for specifically where I am located in the university.”

Participants also reported the training helped increase their level of comfort to engage with student veterans on campus and interest in providing support: “The presentation is very empowering... you feel a level of excitement of ‘what can I do?’”

Participants appeared to derive particular value from the interactive training components (e.g., guided imagery exercises to promote reflection on the experiences of service members/student veterans, providing written/verbal impressions on potential challenges and opportunities for student veterans in higher education, questions related to learning objectives that required oral feedback from audience members): “I liked how you instructed us to picture what [service members] were feeling. I think it is one thing to talk about, ‘oh, you are going to Iraq,’ but to have to think about how that feels makes it easier to relate to them, or not to relate, but to understand their experiences better.” In general, participants reported the interactive opportunities promoted learning as well as deeper understanding and empathy for student veterans. The majority of participants also noted the information covered during the training was conveyed in a well-organized, logically sequenced manner that “flowed organically” and facilitated subsequent learning.

Areas for Improvement. This theme encompassed participants’ feedback on how to enhance the *Green Zone* program. Areas for improvement focused on the training content, organization, and delivery of information. Content-related feedback encompassed participants’ impressions on the quality and relevance of the information provided in the presentation as well as observed limitations or gaps in the content. In contrast, organization-related feedback was focused on how effectively the training content was presented and potential improvements to the structure, formatting, sequencing, or flow of information. Finally, delivery-related feedback encompassed

participants' perceptions on the extent to which the program material and facilitation efforts stimulated interest and engagement. Although feedback was not often mutually exclusive to one area, participants' impressions on the three sub-themes for Areas for Improvement are discussed separately in the following subsections.

Content. Overall, participants expressed a desire for additional content regarding common challenges that have been reported by student veterans on campus. Recommendations to incorporate more “real-life examples” were ubiquitous, with many participants expressing a desire to hear “directly from the horse’s mouth” what barriers existed for student veterans on campus. Nearly all participants recommended incorporating veteran students into the training. Participants also expressed a strong desire for the content to be more “action oriented,” relative to the university community: “[I would have liked more on] what I can change today or do differently right now, after having had this training, that will make me a safer, ‘greener’ zone” (staff participant). Student participants provided similar feedback:

As a student leader, I would be looking for actionable things that I can do to help this population. I would have liked to see more of that... I felt I learned a lot about veterans and their specific needs, and I would have liked to see more of what I should, can, and shouldn’t do.

To make the content more salient for community members, participants suggested incorporating survey-based data from student veterans on campus to better characterize the population (e.g., How many student veterans are currently attending the university? How many are undergraduate/graduate students? How many have children? What is the average age of student veterans at the university? What are the top concerns among

student veterans on campus?). Others recommended “diving deeper into what student veterans want us to know” by presenting more quotes or case examples from veterans that would facilitate greater understanding of the populations’ needs.

Other recommendations for improving the content included incorporating additional information on women and other veteran minority groups, GI benefits, and available resources to support student veterans. For example, some participants perceived the training content as too narrowly focused on heterosexual, male service members and veterans, noting there were few images of women and content on LGBTQ populations featured in the presentation. With regard to the content on GI benefits, some participants were surprised by the information presented related to the challenges student veterans face with enrollment and funding for their education. Others were aware of these difficulties and suggested incorporating more “facts and figures” on the various types of educational assistance student veterans may be eligible for or are currently receiving on campus: “Understanding the benefits a little bit more, like the GI bill and the yellow ribbon bill. If they are using those benefits to come here and go to school, I think that, as an administrator, could be something more explained. I hear about some of these things but I don’t know how it works. And then the aspect of student accounts and financial aid. How does that all work together?”

In addition, participants expressed an interest in learning more about common service-related impairments among student veterans. A student participant commented, “Especially for people that have never served, have no experience, this [trauma] is all very foreign to our own lived experience and all the sacrifice that these students have made and have been through . . . I think that is important for us to understand. And how

we can best support them regardless of whether we are a professional counselor or our different roles.”

Others echoed the sentiments expressed by this student participant and recommended including more case examples illustrating how to identify and address signs and symptoms of service-related impairments in a culturally sensitive manner. Relatedly, participants suggested incorporating more content on how to communicate with student veterans on campus in a culturally sensitive manner. One staff member reflected on her own professional experiences, echoing the recommendations from other participants to include more content related to addressing mental health concerns and communication styles among student veterans,

I have found that, faculty or staff reporting a student veteran of concern automatically, there is this assumption that this person [has PTSD and] is dangerous, so more education around PTSD and mental health is really important. Also, you touched on the communication styles. I think veterans’ communication style is often perceived as disrespectful or aggressive. And that’s not typically the intent of the individual delivering the message but that’s how it is perceived, so I think that those two areas deserve more attention in the presentation.

Aside from information on mental health, participants desired more information about resources that are available to student veterans on campus and within the local community. There were mixed opinions on whether information such as points of contact, phone numbers, email addresses, social media accounts, etc. should be incorporated into the training slides, however. Some were in favor of this, and the

majority recommended offering a take-home resource guide as a supplement to the training that provided this information. In general, participants viewed this information as critical to aiding their support for veteran student on campus: “I would say the resources slides are critical . . . the people, the contact information, that should be on the slide or it should be provided as a dossier of resources ready to give out . . . business cards from service providers, all of that, should be ready and available.”

Taken together, participants felt the training content could be enhanced by incorporating additional information on specific topics, original data and insights from student veterans on campus, and practice-oriented implications or exercises. Participants also noted content that they found confusing or would have preferred to be presented in a different manner. For example, several participants suggested removing acronyms, explicitly defining the meaning of certain visual elements contained in infographics, and adjusting font styles on specific slides to enhance the clarity of information presented. Of note, although the majority of participants suggested incorporating additional information on the slides, some expressed concerns that doing so might actually inhibit learning by extending the length of the presentation and making it more difficult for audiences to remain engaged. There were mixed sentiments on whether the breadth of information covered was appropriate for all audiences, “I think for some groups it may be too much information, and for some groups it may not be enough.” Some participants felt the training provided information that was applicable to all audiences whereas others suggested the content should be tailored to audience members’ specific interests, level of knowledge, or unique involvements with student veterans on campus. These reflections from participants are discussed further in the following section.

Organization. The majority of participants perceived the organization of material to be cohesive and linear, “I think the organization was perfect. I thought the flow of the presentation was very organic and made logical sense.” A few participants suggested there was a disproportionate focus on certain content areas, however, and provided specific recommendations for enhancing the structure and flow of information. For example, these participants suggested condensing the military-focused segment of the training and expanding on content related to student veterans’ campus experiences and implications for the university community, “I would have liked to see a more equal distribution of general training about service members and student veterans and what the resources here are on the campus and what we can do to support students.” A few participants expressed a desire for a stronger introduction to the training and proposed modifications to the structure to facilitate this. Specifically, these participants suggested beginning the training by reviewing the common challenges student veterans encounter on campus in more detail to underscore why it is important for audience members to participate in *Green Zone*. Some also recommended rearranging the slides in an effort to strengthen the introduction (e.g., moving the slides pertaining to common challenges and what community members “need to know” about student veterans to the beginning of the presentation and subsequently proceeding with slides on military culture and service, veteran student statistics, supportive strategies, and available resources). This feedback was not ubiquitous across focus groups, however, and the majority of participants suggested reordering the slides would be problematic,

I think the order in which the information is presented is good, because it builds on each other. And I think if you rearrange it, there will be gap in

the knowledge. Like, for example, if you were to talk about service-related issues before you talked about veterans' experiences, it wouldn't make much sense or help you understand why they develop specific issues such as PTSD.

In general, participants perceived the organization to be effective for delivering a broad range of information relevant to enhancing knowledge and awareness of student veterans on campus. Critical feedback related primarily to the balance of content related to the military and student veterans at the university.

Delivery. Participants provided valuable feedback and recommendations for enhancing the delivery of information to stimulate engagement and interest. Most notably, participants recommended a variety of supplementary multimedia be incorporated, "If you want to reach a broad audience you have to engage people who learn differently. Have different multimedia stuff, have interactions, and have auditory ways [of promoting learning]." Some participants suggested including video segments or images and written biographies from student veterans attending the university and making slides more dynamic by integrating links to various media content related to specific topics or resources discussed during the training.

To enhance audience members' learning experience, participants also recommended incorporating more interactive, group discussion opportunities, "I think it would be helpful to have more interaction with the audience. When [the training facilitator] did that, I felt more engaged. I think more of that would make the presentation more effective." Some participants suggested using more question prompts around communicating with student veterans to encourage audience members to think critically

about the population and develop cultural sensitivity (e.g., “What is an example of a respectful versus disrespectful question to ask a student veteran?” “Is it okay to say ‘Thank you for your service?’” “Is it okay to ask someone if they are considering suicide?” “What are some things you can do to engage student veterans on campus?”). Others suggested utilizing case vignettes to facilitate role-playing exercises or small group discussion among audience members (e.g., “Here is a vignette. Discuss how you would handle this situation with your group members;” “With a partner, engage in role-playing to address the issue identified by the veteran student in this case scenario”) or incorporating “polling now” technologies to promote intergroup dialogue. Participants also expressed a preference for discussion prompts, case vignettes, and “best practice” recommendations to be included on the training slides as opposed to communicated verbally, “I think providing more examples that are spelled out [on the slides]. A lot of the more powerful examples you [the facilitator] were sharing verbally.” Others suggested adding concrete illustrations of the supportive practices discussed during the training to the presentation slides (e.g., an example of a “concise and direct” email, a list of questions to ask or avoid when engaging with student veterans in staff/faculty trainings).

Moreover, there was strong agreement among participants that having a student veteran from the campus community share their experiences during the training would enhance the delivery and potential impact of the program,

Especially for training purposes, it is important to present an actual person from the population. I would have preferred a video, like, “hey, I’m a veteran. I am in the Air Force. Don’t ask me do I kill people.” Hearing it

from the horse's mouth. That would have driven the point home and fostered a better connection.

Participants generally conveyed that the opportunity to interact with student veterans directly would strengthen their sense of connection and investment in the community. Some participants commented that video segments or personal biographies from student veterans would be sufficient to facilitate such connections. One staff member reflected,

I would have liked to see more of the actual voice of student veterans.

There were a lot of lists like, 'this is what the students say they want or say they need or say they experience,' and, with something like this, where we are trying to connect with them, just getting their own words, like with a quote or video, can help [facilitate] that connection.

Students echoed sentiments from staff/faculty regarding the potential impact of including more material featuring veterans on campus, "A video or quote or picture or something would be a way for students to connect personally because we might see [student veterans] in class or around campus and then, we would be more aware." Some participants also suggested inviting staff members who regularly engage with student veterans to present during a segment of the training. For example, one participant recommended having a staff member involved in the certification of veteran benefits discuss their experiences and recommendations for addressing existing barriers, either during the presentation or in a featured video segment. As previously mentioned, participants also desired take-home materials containing information from the training and a list of on-campus resources for veterans.

Finally, some participants suggested tailoring the training to specific groups (e.g., staff, faculty, students) or campus entities (e.g., housing, enrollment management, wellness and recreation), although there were mixed opinions on the feasibility of this approach. For example, several participants noted it would be challenging to deliver the broad scope of information covered during the training in addition to tailored content for specific audiences at the university. Some suggested developing advanced modules on specific content areas or for unique audiences to augment the training, “This can be a generic training that you launch to any audience that needs it, but then, if it is [resident advisors] or [student services] or whatever unit at the university, [you can offer] a very different, customized, and tailored approach.” Recommendations for future program development included creating modules on mental health-related issues and veteran student enrollment and certification procedures. There were nonetheless some participants who noted the potential for including more nuanced information within the existing training; these participants suggested minor adjustments to the content to facilitate tailoring (e.g., condensing the sections on military culture when individuals in the audience have more knowledge in this area, further tailoring the implications for supporting student veterans on campus).

Knowledge Enhancement and Value. This theme encompassed participants’ reflections on the knowledge they gained during the training and potential applications of the information in their personal and/or professional lives. Participants universally reported learning new information about student veterans as a result of participating in the training. The majority of participants reported that the training enhanced or extended their basic knowledge and vocabulary related to military and veteran issues. One staff

participant commented, “Having language to put with things that I had kind of collected in my mind but did not have the words to articulate necessarily . . . this [training] was kind of the pathway to deliver that.” Others expressed similar sentiments about acquiring factual knowledge and terminology during the training, and suggested the information made them feel more comfortable and competent to interact with student veterans on campus,

I see [veterans] as this kind of exclusive club that I don’t know anything about, and so I am almost scared to approach them . . . that’s why this training is so helpful because now that I at least know a little bit of the terminology or I have a better sense of the population . . . I don’t feel as paralyzed to even pierce that world.

Participants also expressed enthusiasm about having gained new insights into student veterans’ strengths and successes, the challenges they experience within higher education, and available resources. Students and staff reported that learning this information underscored how little they knew and how critical it was to develop more awareness of the populations’ needs. Some shared that they were surprised by some of the information they learned, and that they developed a new understanding of the population from participating in the training, “I think a lot of it really surprised me. The fact that their GPAs are higher, for example, I didn’t expect that . . . I don’t know if it is ignorance or just not being taught, but I learned a lot.” Similarly, other participants felt the information they learned helped dispel stereotypes and misconceptions about veterans, “The media presents a certain image of a veteran or a service member . . . [the training] dispelled some myths for me.”

Moreover, both staff and students indicated that they felt inspired to apply the knowledge they gained during the training to enhance support for student veterans on campus. For example, several participants expressed an impetus to institute new practices, procedures, or programs for student veterans within their departments and organizations. Some suggested changes included hiring a veteran liaison; developing new, targeted on-boarding procedures for student veterans; offering on-campus engagement activities oriented toward student veterans; developing more efficient ways to assist student veterans in navigating decisions and challenges related to enrollment and benefits; and targeting student veterans for employment, mentorship opportunities, and interdepartmental or organizational collaborations that might benefit from or highlight their unique strengths. Echoing sentiments from others, one staff member commented, “I think [the training] was sort of a reminder that we should be doing more with these students. When they organize the events, we should go, which we already try to do, but [the training] kind of reenergized me. Like, we should do these things!” Other participants were also inspired to invite more staff, faculty, and students from their respective departments or organizations to participate in the training, and/or to seek out additional resources to inform their understanding of the military and student veterans.

In addition, participants anticipated the information they received during the training would be especially useful in interacting with student veterans on campus, and reported feeling more inclined or prepared to do so as a result of their participation:

You now want to reach out and help them [student veterans] . . . I think the key is for everyone involved to become aware and be able to direct them. If I can’t do anything [else], maybe I can direct them with the

resources that you provided. We are all going to come into contact with them some day. It would have been helpful to have this information a long time ago.

Several participants also felt the training inspired them to become more attentive to whether they are engaging with student veterans and to cultivate deeper connections with these students. One staff participant shared, “I think the training is a good way to bridge the gap between the ‘us-and-them’ mentality.” Others felt similarly and reported an impetus to “bridge the gap” by making greater efforts to get to know student veterans upon their enrollment in degree programs, in classroom or extracurricular settings, or by collaborating with and/or attending events sponsored by the VSO:

[The training] made me feel a little bit more comfortable having conversations with them. Not that I was on edge, but I didn’t previously know what to ask them or what wasn’t good to ask them . . . this makes me feel a lot more comfortable and knowledgeable and empowered to have conversations with them and engage with them in ways that make them feel comfortable.

Nearly all participants expressed sentiments that the training engendered empathy and compassion for service members and veterans. Thus, the training reportedly fostered a desire to engage student veterans with greater sensitivity and purpose with the goal of enhancing their sense of belonging on campus.

CHAPTER V:

DISCUSSION

Although *Green Zone* has received national recognition as a veteran-focused initiative within higher education, no gold standard protocol currently exists nor has substantial empirical research been conducted to offer colleges and universities guidance on implementing the Program. Institutions of higher learning have therefore been challenged with initiating *Green Zone* programs in the absence of a central reference point or meaningful scholarship. The current study addresses this limitation and contributes to the extant literature focused on student veterans by reporting on the systematic development, implementation, and evaluation of a *Green Zone* program. In the sections that follow, I highlight the specific contributions and implications of the study findings. Broader recommendations for researchers and educators are subsequently provided. I then discuss the potential limitations and considerations for replicating the study. The chapter concludes with final remarks on the potential value of the *Green Zone* program.

Contributions and Implications

One strength of the study is that it represents a meaningful collaboration between the principal investigator and the university community in addressing the needs of student veterans on campus. Staff, faculty, and students reported benefiting from their participation in *Green Zone* and offered critical feedback on how to enhance the program, thereby creating the potential for educating future audiences more effectively. At the conclusion of data collection, a community forum was held, during which I reflected on the major findings from the study and facilitated discussions with audience members

regarding prospective developments of *Green Zone* at the university. Several administrative staff who attended the forum and/or participated in the study expressed an interest in sustaining the program on campus; they will be provided the *Green Zone* manual with additional highlights reflecting the recommendations from participants on potential future modifications to maximize its community impact.

More broadly, the findings have implications for other institutions interested in initiating similar veteran-focused programming on their campuses. The current investigation was conducted at a private, not-for-profit university where the student veteran population is relatively small in comparison to some public, 2- and 4-year institutions. The university is located within a state that has the third largest veteran population in the nation; the county encompassing the university has a sizable concentration of veterans. Neighboring public institutions host much larger veteran populations. Public institutions, particularly those that are located in regions of the country with a dense veteran population, are most likely to have sustained programming for veterans on their campuses and to offer professional development opportunities such as *Green Zone* for their staff and faculty (McBain, 2012). As such, the study findings may be especially relevant to institutions with low student veteran enrollment that have not implemented such programming on their campuses, or that may have fewer local resources to support such endeavors. Given the paucity of research in this area, the contributions of the study are nonetheless wide ranging and can be used to inform the development of *Green Zone* programs on college and university campuses nationwide.

Corroborating anecdotal reports from *Green Zone* audiences at other institutions, study participants perceived the training to be effective for enhancing their knowledge of

the military and student veterans' issues. In addition to gaining knowledge of relevant terminology and concepts, participants indicated that the training helped them develop a deeper understanding and empathy for student veterans and the challenges they encounter transitioning to college. Participants reported feeling empowered by the information they received and expressed newfound enthusiasm for engaging with and supporting student veterans on campus; some even noted increased, perceived self-efficacy to do so as a result of their participation. Participants also identified personal stereotypes or misconceptions they had about student veterans, which they believed the training helped demystify and dispel. Given student veterans' exposure to stereotyping has been found to impede their social integration and well-being (Obsorne, 2013; Persky & Oliver, 2010), the latter findings are significant. Taken together, the study outcomes highlight the potential for *Green Zone* to be a meaningful intervention for addressing the "military–civilian knowledge gap," and thereby engendering more welcoming, supportive campus environments for student veterans.

In addition, the quantitative findings further underscored the potential benefits and scope of influence of *Green Zone* trainings. On average, participants demonstrated a six-point increase from baseline on post-training knowledge assessments, which is significant given the mean baseline score was 10.57 points and the total possible score on the assessment was 22 points. The findings also suggest *Green Zone* is an effective program for educating community members with varied degrees of exposure to military and veteran populations. For example, participants' prior exposure to student veterans or personal relationships with military-affiliated individuals did not facilitate or impede knowledge acquisition; all participants, including those with prior exposure and potential

for cross-cultural learning, demonstrated higher scores on the post-training assessment relative to baseline. This finding was particularly significant given the vast majority of individuals in the U.S. have reported limited knowledge about the population and the potential effects of ignorance (i.e., stereotyping, discrimination) on the well-being of veteran populations.

Participants' demographic characteristics also did not appear to influence learning potential. Specifically, participants' university affiliation, age, and level of formal education, which contributed to mean differences in baseline scores, did not have a significant effect on post-training knowledge. It is possible that the analyses were underpowered and that a larger sample size would have allowed for the detection of meaningful differences across groups as well as potential interaction effects of affiliation, age, and level of education. However, considering participants' feedback in focus group interviews, it is more likely that the findings reflect participants' level of engagement and interest, genuine acquisition of knowledge, and the congruence of the training content and items on the knowledge assessment. The benefits of *Green Zone* therefore appear to be wide ranging and applicable to diverse individuals. Taken together, the study findings lend support for the existing best practice recommendations for academic institutions, which include offering trainings on student veterans' issues to enhance campus community members' knowledge of the population and, in turn, their capacity to provide support (Elliott et al., 2011; Griffin & Gilbert, 2015; Rumann & Hamrick, 2009).

Enhancing Green Zone. Consistent with the central themes that emerged from the analysis of qualitative data, several recommendations for modifying the *Green Zone* content and delivery were ubiquitous across training cohorts; these recommendations are

subsequently outlined and should be prioritized in making decisions on *Green Zone* program development.

Program Delivery. Foremost, participants strongly recommended inviting student veterans on campus to share “real-life examples” of their military service, reintegration, and experiences as students during the training to promote a deeper understanding and “sense of connection” to the student veteran community. Other institutions (e.g., University of Illinois at Urbana-Champaign, University of North Carolina, University of Texas, Virginia Commonwealth University) have adopted similar approaches and underscored the potential value of creating opportunities for audiences to engage with student veterans as a part of the learning process (Nichols-Casebolt, 2012; Osborne, 2014). Facilitating meaningful dialogue among individuals from diverse backgrounds may promote cross-cultural awareness and competency (DeLong et al., 2011; Woodford et al., 2014). In the current study, there were notable barriers to incorporating student veterans in the training, which other institutions may likewise encounter. I was fortunately able to integrate information from my preliminary study and ongoing engagement with the local student veteran, which participants reported was especially meaningful, perhaps in light of the lack of representative co-facilitators. To maximize the relevancy of trainings for campus communities, it is recommended that facilitators facing similar challenges to involve student veteran co-facilitators make efforts to “capture veterans’ voices” by other means (e.g., including video segments or quotes derived from interviews with student veterans on campus). Partnering with student veteran organizations may be helpful in obtaining local data that can be incorporated into trainings. Resources such as the Student Veterans of America and Military Times, which

publish annual statistics and substantive op-ed articles on the veteran student population, could also be utilized to ensure trainings reflect up-to-date information and perspectives from the community, particularly when there are challenges to obtaining local data.

Moreover, participants found the interactive components, which offered them the opportunity to reflect on and share their perspectives on common situations encountered by service members in the military or student veterans entering higher education, especially meaningful. They also appreciated the use of visual aids such as infographics outlining population data and photos of student veterans. Participants recommended future facilitators incorporate more interactive learning opportunities and multimedia to maximize audience members' engagement and learning potential. Some suggestions included featuring case vignettes followed by break-away small group discussions or role-playing exercises, using polling now technology to generate visual representations of group attitudes and opinions in response to question prompts, or including videos from deployed service personnel and student veterans speaking to their experiences and recommendations for providing support. Offering experiential exercises and opportunities for intragroup dialogue in cultural sensitivity trainings has been recommended to facilitate audience members' practical application of theoretical knowledge (Breslin & Yoshida, 1994; Pruegger & Rogers, 1994). Interactive learning experiences may be especially useful for promoting the development of cultural sensitivity toward minority groups among students in higher education (Zúñiga et al., 2007). The degree to which these opportunities for engagement and variety of multimedia can be incorporated into *Green Zone* trainings may depend on the selected design and duration of the program, however.

Among the *Green Zone* programs that are currently being offered on college campuses and surveyed as a part of this study, various training formats have been implemented. For example, some institutions offer day-long or multi-session trainings that allow facilitators more flexibility in incorporating various engagement and learning approaches. Implementing large scale interventions of this nature may not be feasible for some colleges and universities, however, especially those with limited resources, given the time-intensive nature of facilitating trainings. Some institutions have therefore opted to offer more time-limited, lecture-style trainings. The extent of data collection procedures involved in the current study and potential for participant fatigue also favored a time-limited design. A lecture-based delivery approach was also most suitable to delivering, within a limited timeframe, a breadth of information on the military and student veteran population to address the knowledge gap that was identified in my preliminary study. A lengthier or multi-session format may have permitted the incorporation of more opportunities for group discussion, practice-oriented activities, and multimedia such as videos or vignettes from student veterans. However, more extensive programs may inadvertently contribute to reduced or selective participation from campus community members. For example, in the current study, significant barriers were encountered eliciting student participants, even with the time-limited design. Expanded programming may therefore be more desirable for staff and faculty, or individuals with greater investment in the student veteran population. That said, most participants suggested that, without the extensive data collection components, the length would have been appropriate, and that additional time focused on the programming would not be undesirable or burdensome. Within the time-limited program format, future facilitators

might still consider recommending Kognito Interactive as a supplementary learning opportunity for participants following the training. Kognito is a novel online program that has been initiated at over 185 institutions and organizations (SVA, 2018) and offers users virtual simulations of different situations staff, faculty, and students may encounter when interacting with student veterans on college campuses.

Finally, participants suggested offering tangible resources for *Green Zone* audiences as a supplement to the training to enhance their capacity to provide on-campus support. Participants reported the information on existing campus, local, and national resources that were reviewed during the training were especially meaningful. In the current study, the breadth of resources available and time restrictions imposed by the study procedures made it challenging to provide an exhaustive review of these supports during the training.

It was also not permissible to offer supplemental resources to participants in the current investigation given the need to protect the study materials and integrity of the data collected. Even without the research component, facilitators are likely to encounter similar constraints for including extensive information on resources within time-limited *Green Zone* trainings. Future audiences should be provided a take-home guide containing more specific information on available resources to augment the content that is delivered during trainings (e.g., points of contact, phone numbers, email addresses, websites, and social media accounts). This strategy would not only conserve time, which could be allocated to other topics and activities, but would also provide a tangible point-of-reference for community members to utilize in subsequent encounters with student veterans on campus. Participants also recommended providing a laminated document or

packet containing “quick facts” on student veterans and other information covered during the training. Individuals involved in developing the materials should consult with student veterans on campus to ensure they are comfortable with the information being circulated on campus, and to avoid potentially stigmatizing or marginalizing students who may already feel misunderstood or marginalized (Elliott et al., 2011; Osborne, 2014; Rumann & Hamrick, 2010).

Program Content. In addition to offering recommendations for enhancing the delivery of *Green Zone*, participants provided critical feedback on the content that should be considered in future program development efforts at the university. Other institutions might benefit from reviewing these findings in selecting material to include in their *Green Zone* trainings. First, participants noted the “basic training” on military terminology and common experiences of service members was a strength of the program, which should be maintained in future adaptations and incorporated into trainings at other institutions. This content reportedly helped participants better understand veterans’ lived experiences and increased their perceived self-efficacy for interacting with and supporting these students on campus; this was especially true for participants who reported limited baseline knowledge of the population. These findings parallel existing research that has recommended LGBT+ Ally trainings provide clear definitions of commonly conflated concepts to engender a “shared language” for audience members in the learning process that can also be applied in their future engagements with sexual minority students (Adams, Bell, & Griffin, 2007; Woodford et al., 2014). It is also recommended that facilitators maintain a strength-based approach in adapting the *Green Zone* content. Participants reported the information highlighting student veterans’

successes and potential contributions to the campus community helped dispel misconceptions about the population and encouraged critical thinking about the ways in which student veterans could enrich campus life.

The study findings highlight opportunities for expanding the *Green Zone* content in certain areas as well. Foremost, participants expressed a strong interest in receiving more information on veteran mental health and strategies for addressing the needs of students with service-related impairments. Given that over half of student veterans have reported having a VA disability rating (Cate et al., 2017) and the pervasive stigma around help-seeking among veterans (Convoy & Westphal, 2013; Meyer et al., 2015; Pietrzak et al., 2009), it might be valuable to incorporate opportunities for group discussion or role-playing exercises regarding how to approach or facilitate care in situations likely to warrant intervention. Consistent with previous recommendations from scholars (Hopkins et al., 2010; Kirchner, 2015), participants suggested facilitating interactive exercises to illustrate proper etiquette for conversing with veterans about their service experiences and recognize potentially triggering topics or behaviors within classroom settings. Decisions regarding mental health-related content should be made with discretion and sensitivity, however, and a disproportionate focus on PTSD, TBI, and other trauma-related service impairments should be avoided (Osborne, 2014). In the preliminary study (Weiterschan et al., 2017), veteran participants expressed concern that community members may harbor stereotypes about their mental health statuses (e.g., “all veterans have PTSD and are inclined to commit suicide”) that impede genuine understanding and interpersonal connection. This may be largely owing to media coverage of the wars in Iraq and Afghanistan (Kleykamp & Hipes, 2015) that frames veterans as “damaged” by

their service. Indeed, one study found that 33% of civilians believe the majority of veterans suffer from PTSD (Jordan, 2012), despite the reality that only 13.8% of veterans involved in recent military conflicts have reported developing symptoms of the disorder (Tanielian & Jaycox, 2008). Thus, in designing the current training protocol, decisions about mental health-related content were purposefully made to mitigate potential stereotypes about student veterans. It is recommended that others adopt a similar approach to avoid overtly pathologizing or exacerbating existing prejudices about student veterans (Osborne, 2014). Facilitators should also be prepared to field questions from audience members by immersing themselves in the existing literature. In the current study, participants often posed questions for which scant empirical research existed to answer them (e.g., “Are student veterans at greater risk for suicide than nontraditional students?” “Are female veterans more likely to have experienced sexual assault than other student groups?”). Having a strong basis in the scholarship related to veteran mental health allowed the facilitator to respond to these questions from an informed position, reducing the likelihood of perpetuating misconceptions about the population.

Moreover, participants requested more information on specific subpopulations, including military and veteran dependents, women service members, and LGBTQ veterans. Participants noted a disproportionate focus on male service members and veterans’ experiences, which was not an oversight but rather a purposeful attempt to ensure the training provided information on the vast majority of student veterans with which community members are likely to come in contact. Indeed, the military and veteran population is overwhelmingly representative of non-Latino White, heterosexual, men (National Center for Veterans Analysis and Statistics, 2016). Although the number

of women in the military and among student veterans on college campuses is rising, they still comprise a small subset of the population. They nevertheless have unique experiences, challenges, and needs (e.g., Ochinko & Payea, 2018a; Rumann & Hamrick, 2009; Ryan et al., 2011; Shackelford, 2009), which I have identified in my own research (Weiterschan et al., 2017) and deserve more attention in future trainings. Additional content on military or veteran families, and lesbian, gay, bisexual, and transgender veterans, might also be included. Participants also suggested diversifying the content to include more information on service members in non-combat, support roles within the military and who deploy to forward operating bases where there is less risk of combat exposure. Although such modifications would potentially provide a broader scope of understanding, there are simply far too many military occupational specialties and conceivable deployment experiences to cover in a single training. There is also rather persuasive evidence to warrant the disproportionate focus on service members and veterans with combat experience. The vast majority of student veterans on college campuses served in the military post-9/11 and were deployed to Iraq and/or Afghanistan. Approximately 50% of service members who deployed post-9/11 reported being exposed to combat or other traumatic events (Pew Research Center, 2011). Student veterans with combat exposure are at greater risk for developing PTSD and experiencing emotional distress in school (Ellison et al., 2012; Gates et al., 2012; Nyaronga & Toma, 2015). Thus, in the time-limited format, it seemed warranted that the program content be oriented toward understanding and supporting student veterans who deployed to combat zones and are likely to experience more significant barriers adjusting to campus life. A

lengthier training might have allowed for more nuanced information about the population to be presented and discussed.

Finally, participants, mostly those in administrative roles and student services, suggested including additional content related to understanding veterans' educational benefits be incorporated in future trainings. These participants recommended including more information on the different types of benefits and eligibility requirements, as well as statistics on how many student veterans on campus were enrolled in the various programs. Student feedback seldom focused on GI benefits, however, suggesting incorporating additional content in this area may not be beneficial for all audiences. Given the breadth of benefits and intricacies of eligibility requirements, a decision was made to omit this information so as not to fatigue study participants. Future facilitators might consider offering handouts with more information on GI benefits and the veteran certification process to ensure the training remains applicable to a variety of audiences. Given the barriers student veterans experience navigating these aspects of their enrollment (e.g., Borsari et al., 2017; Griffin & Gilbert, 2015; Weiterschan et al., 2017), such information is certainly worth incorporating in some capacity. Some staff and faculty participants suggested further tailoring the training content to specific university entities or creating additional modules to provide more nuanced information on topics that might be of particular interest to select audiences—including GI benefits. In the current study, the two main objectives were to develop a program that provided a broad range of information relevant to supporting student veterans at the university and to elicit feedback from diverse community members to inform future developments. As such, the program needed to be implemented in a relatively uniform manner and had to be general

enough to be applicable to a variety of audiences. There is potential for the program to be tailored further for future audiences.

Managing the competing demands of scheduling and tailoring programs to audiences' needs and interests is likely to be laborious and time consuming, however. An alternative approach would be to offer *Green Zone* as a web-based program that community members could access and complete at any time and at their own pace; supplementary online modules focused on specific topics or that would be of particular interest to certain university groups could be developed and featured online as well. Although a handful of universities have developed web-based modules for *Green Zone*, this has not been the norm. Online trainings may reduce the burden of staffing a regular facilitator who would also need to dedicate time to tailoring content to various audiences, and would have the added benefits of increasing accessibility and participation, thereby enhancing the potential impact of the program on the campus community. At the same time, it is not clear what resources exist and would need to be allocated to facilitate the development of online modules. Making the training available online could also impede interpersonal learning likely to occur in a classroom context where there are opportunities to engage directly with student veterans and other audience members with potentially valuable insights. A possible alternative could be a hybrid model, whereby foundational information is presented in person and more nuanced topics related to the population are available as online modules. If online or advanced modules are not feasible, individuals could be directed to the VA community provider toolkit (mentalhealth.va.gov/communityproviders/military_culture.asp) and Center for Deployment Psychology website (<https://deploymentpsych.org/online-courses/military->

culture), which both offer free military cultural competency courses; these resources could not only be used to supplement or extend learning for participants but also assist future facilitators in tailoring the *Green Zone* program. Taken together, the decision to offer *Green Zone* as an in-person seminar or online module(s) should be carefully considered. Future facilitators should consider the availability of human and technological resources as well as the effects of program delivery modalities and duration on participant engagement in making decisions about the training content.

Future Research Directions

Although offering trainings such as *Green Zone* for staff and faculty is among the recommendations for veteran-friendly institutions (ACE, 2018), scholars have yet to examine the effectiveness of such programs for enhancing student veterans' sense of belonging on college campuses. Such research is needed and critical to advancing our best practices for supporting student veterans in higher education. The current study provides a suitable framework for extending this line of research in an academic setting. As a first step, researchers should consider replicating the current study by developing, piloting, and gathering feedback on *Green Zone* prior to large-scale dissemination; this would ensure the developed program is suitable for the audiences for which it is intended, thereby maximizing its potential to enhance the local climate for student veterans. As there have been few published articles to provide guidance and recommendations for institutions seeking to develop and implement *Green Zone* programs, replicating the study would in and of itself be a substantial contribution. To extend this line of inquiry further, researchers might consider utilizing the Community Readiness Model to evaluate the campus climate for student veterans prior to and subsequent to implementing *Green*

Zone programs on their campuses. Such investigations would fill a significant gap in the existing scholarship on Safe Zone/Ally training outcomes (Kirchner, 2015; Poynter & Tubbs, 2008) and elucidate whether our best practices for supporting student veterans are indeed “best practices.”

Future investigations might also explore the benefits and limitations of offering general trainings versus tailored modules on specific veteran-focused topics for campus communities. Ideally, this would be facilitated by administering different versions of the training to campus community members and comparing outcomes. Such investigations may be more feasible if trainings were adapted to be delivered online. Another related line of inquiry that might be valuable to explore is the effectiveness of different delivery modalities (e.g., time-limited, multi-session, in-person, online) on community participation and training outcomes. Participants in the current study suggested offering *Green Zone* as an online module or a series of modules that community members could access at any time and complete at their own pace, for example. Some institutions have already taken to implementing web-based programs. Given that the technological advances of the 21st century have fostered a generational shift toward “on demand” products, services, and even relationships, online programs may maximize community participation and, in turn, enhance the potential impact of training programs. Offering trainings online may also reduce potential experimenter and instrumentation effects that contribute to error and provide researchers maximal reassurance that participants receive identical content. Researchers might also be able to access broader audiences online, thereby mitigating potential sampling biases. It is possible that administering the *Green Zone* training and research components using an online platform would have yielded a

larger and more diverse sample in the current investigation. Nonetheless, there may be limitations to online delivery (e.g., design constraints of technology, reduced potential for interpersonal learning, inability to obtain potentially valuable observational data) that have not yet been documented in the existing scholarship and would be worthwhile to explore in future studies.

More research is also needed to understand the program development processes and outcomes of lengthier, day-long or multi-session trainings in terms of community participation and knowledge acquisition. Several institutions offer such trainings, yet there have been few studies published to elucidate the potential benefits and barriers to these approaches. Researchers should consider collaborating with *Green Zone* or comparable training facilitators at their host institutions to extend our existing knowledge base and offer recommendations for program development. Comparative analyses of different training modalities may also allow researchers to examine the effects of individuals' motivation to participate in veteran-focused training programs. Purposefully assessing individuals' motivation to learn about and support student veterans prior to participating in trainings and evaluating the effects on post-training outcomes may have the dual benefits of assisting with the modification of recruitment strategies and clarifying the receptivity of various delivery modalities within the local community. The findings from such investigations could, in turn, inform recommendations for program development at other institutions and research in this area, more broadly.

Finally, scholars should support local efforts to develop better systems of tracking and collecting data on student veterans on their campuses. Aside from the reports published by the SVA (Cate, 2012; Cate et al., 2017), scholarship examining veteran

student outcomes in higher education has been limited, primarily owing to the lack of comprehensive, interinstitutional systems for collecting such data. National organizations and federal agencies have combined efforts to generate population statistics and outcomes for first-time, full-time, and non-transfer students, yet a sizable proportion of veterans are enroll part-time or transfer from 2-year to 4-year institutions (Cate, 2012; Marcus, 2017; Schnoebelen, 2013) and may be unaccounted for in these estimates. Tracking student veteran retention is especially critical to determining the effectiveness of targeted veteran programming at colleges and universities, yet many institutions do not have systematic procedures in place to obtain such data (McBain, 2012; National Association of Student Personnel Administration, 2013). In the current study, participants expressed a strong desire for more data on the local veteran student population and often asked pointed questions for which there were no precise estimates available to provide clarification (e.g., How many veterans are enrolled in the law school versus arts and sciences? How many veteran dependents are currently enrolled at the university? What benefits are the majority of veterans on campus receiving?). Much of the local data that were incorporated into the training were derived from the preliminary study, unofficial records, or concerted efforts to collaborate with various administrators at the university to obtain information on student outcomes. The limitations to obtaining student data are discussed further in the following section yet reflect an opportunity for scholars at the university and other research-intensive institutions to assist with the development of more streamlined data collection procedures to track student veteran outcomes. Such efforts could potentially aid in the development of novel strategies to enhance support for these students on college campuses.

Considerations for Higher Education. First and foremost, the study findings highlight the potential for *Green Zone* to facilitate a more inclusive, culturally responsive campus environment for student veterans at the university. Although more research is needed to determine whether *Green Zone* directly contributes to enhancing student veterans' sense of belonging at the university, administrators and staff should explore potential avenues for sustaining the program on campus. Other colleges and universities are likewise encouraged to develop and implement similar programs on their campuses. The program development procedures in the current investigation can serve as a model for other institutions. For example, it is recommended that institutions conduct a community-based needs assessment prior to implementing *Green Zone*; this would help to (a) determine whether there is a need for such a program, thereby reducing the potential misallocation of resources, and (b) obtain information and valuable insights from student veterans that could be incorporated into trainings. To assist with the needs assessment, universities might consider creating a steering committee comprised of administrators, faculty researchers, and student veterans. The Committee could additionally be responsible for (a) establishing standards and objectives for the *Green Zone* program, (b) determining what and how resources will be allocated to implement the program, and (c) monitoring progress throughout the program development and implementation stages (Osborne, 2014).

To further assist with *Green Zone* program development efforts, university leadership should collaborate and maintain frequent communication with student veteran organizations on their campuses (Ackerman & DiRamio, 2009). Students affiliated with these organizations could be asked to serve as co-facilitators for the training or provide

suggestions on content for the training that would best reflect the interests and needs of the local community. The latter strategy may be particularly beneficial when there are challenges to involving student veterans in the trainings, as was the case in the current study and is likely to be the case elsewhere, given that many veterans have competing external commitments such as part-time jobs and families. In the absence of veteran co-facilitators, study participants remarked that the incorporation of quotes from student veterans on campus and local data made the training more relevant to the university community. A preliminary needs assessment and collaborative relationship with student veterans on campus could be helpful for obtaining these data. Involving student veterans in *Green Zone* program development efforts would not only enhance the training content but also serve to promote their integration and sense of belonging on their campuses.

Further, colleges and universities have been encouraged to hire staff liaisons who are knowledgeable of military and veteran students' issues (Griffin & Gilbert, 2015; Persky & Oliver, 2010). These individuals could also be called on to spearhead *Green Zone* program development efforts. Mental health counselors and staff within campus-based disability services could also have much to contribute to training content or discussions focused on service-related impairments. Unfortunately, many institutions have reported understaffing of individuals with expert knowledge of the student veteran population as well as counselors trained to assist with PTSD and TBI—the most common injuries among post-9/11 veterans (McBain, 2012). Institutions that have limited veteran-focused human resources may be all the more in need of educational programming such as *Green Zone*. In these contexts, representatives from local veteran organizations or

healthcare systems could be invited to provide information on topics relevant to the population that could be incorporated into trainings (Griffin & Gilbert, 2012).

Finally, there remains a need for colleges and universities to develop more sophisticated systems of tracking student veteran outcomes (Cate et al., 2017).

Participants in the current investigation expressed a desire for more local data on the student veteran community, such as degree completion rates for veterans, the percentage of veterans enrolled in specific departments or degree programs, the number of veterans using different tuition assistance programs, etc. Some of these data were not available to me at the time of the study, reflecting a common limitation at many institutions: the lack of reliable assessments to gather information from student veterans (McBain et al., 2012). Having adequate systems of data collection in place is critical to evaluating the success of veteran-focused programming, including *Green Zone*. The availability of local data would also make it less challenging for institutions to develop and tailor *Green Zone* content to their campus community. Administrators and staff in various departments and student services could also utilize this information to develop other innovative and responsive policies, procedures, and programs for veterans. For example, having information on graduation rates for veterans in various degree programs could help administrators determine whether there is a need to augment or reallocate resources for student veterans on campus.

That said, federal privacy guidelines present challenges for collecting data on student veterans. As students are not required to disclose their veteran status, it is more difficult to track and obtain information on the population. Individuals who elect not to disclose their veteran status may be entirely unaccounted for and represent a more

vulnerable population in need of support. To overcome these barriers, college administrators might consider partnering with student veterans' organizations to disseminate surveys to affiliated veterans. Facilitating informal events such as brown bag lunches for student veterans and non-veteran community members to interact and build rapport may help create opportunities for collaboration as well (Griffin & Gilbert, 2012); such efforts could also engender a culture of belonging for student veterans at their host institutions that encourages those who elect to "fly below the radar" to engage. Offering panel discussions with student veterans on campus may create another opportunity to bridge a knowledge gap for community members and provide information that could inform programming decisions when more sophisticated data collection procedures are lacking. In the absence of local data, resources such as the Military Times, which publishes annual statistics on the veteran student population, could be utilized to ensure *Green Zone* trainings reflect up-to-date information.

Study Limitations

There were several barriers encountered in conducting the current investigation that resulted in noteworthy limitations. Foremost, it was difficult to recruit student participants, which resulted in a disproportionate sampling of staff/faculty members. The length of time required to complete all study procedures, scheduling restrictions imposed by university holidays/recesses, and significant collegiate, athletic, and social events were barriers to student participation. Although substantial efforts were made to accommodate the scheduling demands of students, it remained challenging to elicit their participation, which could possibly reflect diminished interest rather than availability. Recruiting a larger sample and additional students would have strengthened the power for statistical

analyses. Future researchers interested in replicating this study should consider the challenges to recruitment and potential limitations imposed by restricted or disproportionate sample sizes.

Relatedly, it would be worthwhile to explore individuals' motivations for participating in *Green Zone* in future studies, as it remains unclear what factors contributed to the disproportionate recruitment of staff participants. For example, staff may have been more likely to participate on account of their existing investment in the student veteran community or, in contrast, they may have perceived limitations in their knowledge of the population that they hoped the training would address. Future investigators might consider including self-report measures or additional questions in focus group interviews to assess motivation. Such information would be helpful in making decisions about recruitment strategies to focus on certain audiences or to increase participation, more generally.

Moreover, the incorporation of multiple data collection strategies made implementing study procedures in less than three hours impossible. To streamline data collection and reduce the extent of participants' commitment, it was necessary to implement certain procedures (e.g., limiting opportunities for group discussion and questions from audience members during the training) that might have impeded engagement and the collection of potentially valuable information. For example, lengthier sessions would have permitted more opportunities for group discussion and spontaneous questions from audience members that could have enhanced participants' experience of the training and learning potential. Future researchers should be mindful of the potential limitations of incorporating multiple, mixed methods on participants' training

experiences as well as consider alternative approaches to streamline data collection. For example, it might be beneficial to collect informed consent and administer baseline measures using an online platform prior to having individuals participate in *Green Zone*. This approach may have multiple benefits. For example, it would reduce the time burden on participants, potentially increasing participant enrollment by allowing more scheduling flexibility. As some participants also recommended including more breaks between tasks, administering preliminary measures via an online platform would allow for more breaks, reducing the potential for fatigue. Ensuring participants completed every item on the preliminary assessments and following up with those who omitted responses proved to be rather cumbersome within the restricted time frame for completing study procedures as well. Having participants complete these materials online would not only mitigate the need for assistants to manage the distribution, collection, and review of paper-and-pencil assessments, but also would minimize the possibility of missing data and eliminate the need for manual data entry, which were potential limitations in the current investigation.

Moreover, the knowledge assessment was created specifically for the study and was not empirically validated. I followed existing scale development recommendations (e.g., Krosnick & Presser, 2010; Worthington & Whittaker, 2006) and used a deductive approach to design the items for the measure, which was based entirely on the research that was synthesized to create the *Green Zone* manual. Efforts were taken to maximize the potential validity of the measure (e.g., including items of varying difficulty that reflected multiple subject domains; ensuring items were not ambiguous, double-barreled, or leading, and utilized language that would be suitable for most audiences; dissertation

committee members reviewed the measure for readability, clarity, and comprehensiveness). Notably, several focus group participants acknowledged that the training provided information that was consistent with, and helped clarify correct responses for, items on knowledge assessment administered at baseline, providing initial support for the face validity of the measure.

In terms of the reliability of the measure, the correlation coefficient for baseline and follow-up assessments was moderate, suggesting sufficient stability of scores across administrations. It is nonetheless possible the measure was inadequate for capturing the full breadth of participants' knowledge of the military and student veterans or unsuitable for some participants. For example, several items included technical terms that might have been foreign to individuals without significant exposure to military populations or a background in medicine or mental health, which might have resulted in satisficing on the baseline assessment (Krosnick & Presser, 2010). Although there are no known measures of this nature, future researchers might consider using or adapting items from the Center for Deployment Psychology Competent Behavior Checklist (CDP, 2013) or other cultural competency measurement tools that become available in designing an instrument to assess the effectiveness of *Green Zone* programs.

Designing the in vivo evaluation was also an innovative endeavor. Kazdin (2008) suggested researchers have largely neglected exploring the mechanisms underlying the success of interventions and argued, "understanding how, why, and under what circumstances interventions produce desired effects helps identify critical ingredients of change" (p. 58). Although the in vivo evaluations were primarily used to gather additional qualitative feedback, the measure could be used to conduct a more thorough

examination of ratings for each slide, across participants, to determine what elements of the training were more or less effective for promoting learning in different participants. That said, there are potential limitations of the evaluation worth noting. Although most participants indicated the evaluation was “straightforward” and minimally distracting, a few participants noted that the ratings might not reflect the actual value of the slide content but rather their level of knowledge in a particular area (e.g., individuals with less preliminary knowledge on military culture might provide higher ratings on corresponding slides than those with more baseline knowledge in this area). Attempts were made to address this potential confound by carefully examining the baseline knowledge assessments and in vivo evaluations for the few participants who expressed these concerns.

Finally, researchers intervening within their own community are often presented with unique challenges that have the potential to obstruct the collection of meaningful data and disturb the homeostasis of their local ecology. Barth (2018) described the paradox of the “internal-interventionist” quite astutely, “Interveners must simultaneously fulfill roles of researcher producing scientific knowledge and change agent producing solutions . . . The challenge is to manage this permanent tension between commitment and loyalty toward the company and the necessary distance required by the research process to produce scientific knowledge” (pp. 139-140). I felt this tension throughout the research process. For example, a number of individuals contacted me about scheduling trainings for their department, program, or campus organization but could not feasibly participate in the study due to the extent of time required to complete procedures. To protect the integrity of data, I was unable to offer any information to them, thereby

withholding a potentially valuable resource from members of the community. In addition, study participants were not permitted to take notes during the training nor were they provided any take-home materials (e.g., an outline of the information covered during the training or a list of available on campus and community resources) that could have potentially enhanced their support for student veterans on campus. There were also limited opportunities for participants to ask questions about the training content outside of the Q&A segment and subsequent to completing all study procedures. Although these imposed boundaries safeguarded the integrity of data collection, they may have seemed arbitrary to community members, engendering mistrust (Barth, 2018). In addition, it is possible that participants' experience of training and the potential meaning they derived would have been enhanced had there been more reciprocity in the research process through opportunities for engagement and greater access to tangible resources.

Perhaps the most challenging dilemma encountered in navigating dual roles as a researcher and change agent took place during the participant selection process, and likely influenced data collection to some degree. Despite the research team's efforts to ensure only eligible participants were recruited for the study, there were three individuals who presented at different training sessions who identified as veterans on the demographic questionnaire. To avoid exposing or alienating these individuals, a general announcement was made at the beginning of each training session to inform audiences that veterans were not currently being asked to participate in the study. The announcement indicated that they were invited to stay for the training but were not required to complete any of the study procedures and should depart before the focus group sessions began. All of the self-identifying veterans elected to complete preliminary

measures and participate in the training; these participants departed prior to the focus group interviews on all but one occasion. In one session, a veteran participant, who was informed on several occasions they were not required to participate in the focus group session, remained in the room to take part in the proceedings. The facilitator decided on this occasion that asking the veteran participant to leave the focus group amidst the presenting context (i.e., a room full of non-veteran participants waiting to begin the focus group proceedings already delayed by the preceding conversations with the veteran) would potentially do more harm than good. Perhaps the most poignant example of the internal-interventionist paradox to occur over the course of the study, the decision to concede to the role of “change agent” ultimately appeared beneficial. During the session, the veteran asked a few specific questions about the content for clarification purposes and otherwise did not contribute to the discussion. Based on the facilitators’ observations and subsequent analyses of the focus group transcript from this session, the presence of the veteran did not appear to obstruct proceedings or bias data collection. On the contrary, participants seemed to be more vocal about their perceptions of and attitudes toward veterans on campus during this session in comparison to others. This of course raises the question of whether the veteran’s presence evoked these expressions from participants or could have limited data collection in some way. Future investigators should nonetheless consider the potential value of incorporating veterans in trainings and focus groups. Doing so would perhaps engender unique and meaningful discussions to inform decisions on how to enhance the training as well as provide a forum for dialogue between veteran and non-veteran members of the campus community. Although the purpose of the study was not to facilitate cross-cultural dialogue, opportunities for such engagement and

discussion may be valuable and should be offered on college campuses, either within the context of *Green Zone* trainings or other forums, echoing the best practice recommendations for veteran-friendly institutions.

Conclusion

Following the attacks on the World Trade towers on September 11, 2001, then-President George W. Bush addressed members of the U.S. congress and worldwide audiences via major news networks to convey a bold and unwavering message: “We will not tire. We will not falter. And we will not fail.” The address was a reassuring prescription for a grieving nation, yet an ominous forewarning of the decades of domestic and foreign conflict to come. For the 2.2 million service members subsequently deployed to Iraq and Afghanistan it was, perhaps, a call to action. A veteran student at the university who was interviewed during the preliminary investigation for the study recalled, “I was in New York City not far from the [World Trade] towers just before 9/11. I remember watching the news footage of the attack on repeat in total shock and outrage . . . there was an urgency. When we declared war on Iraq I knew I wanted to be *in it* . . . so I joined the [branch omitted].” The veteran completed two tours of duty post-9/11 and enrolled at the university with a similar urgency to be “*in it*.” The conditions that fostered his determination, sense of purpose, and affiliation in the military were very disparate from the realities of student life he encountered, however. Like him, many student veterans struggle to maintain a sense of purpose and connectedness upon separating from the military and are challenged with concurrently reconciling the stark differences between their former world and the academic landscape. It is paramount that institutions strive to adopt the same ethos conveyed in President Bush’s address—to not tire, falter,

or fail—in attempting to foster student veterans’ sense of belonging on their campuses.

The *Green Zone* program can be a means to bridge a cultural divide that impedes the development of meaningful connections between student veterans and non-veteran community members. Educating campus communities on military culture and the experiences and needs of student veterans creates the potential for inclusive and supportive campus environments. It is my hope that the current study will contribute to future efforts to sustain the *Green Zone* program at the university as well as guide other institutions in the development of greener, safer zones for student veterans in higher education.

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Table 1

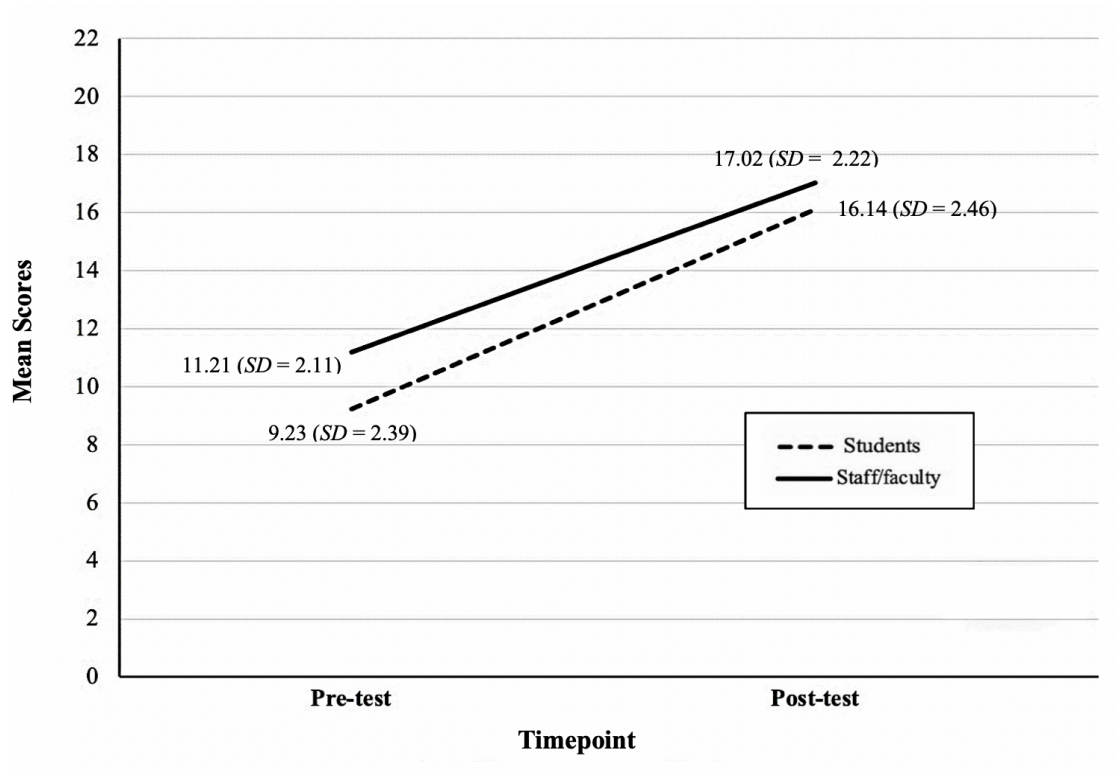
Demographics of Study Sample

Variable	Affiliation					
	Student (n = 22)		Staff/Faculty (n = 60)		Total (N = 82)*	
	n	%	n	%	n	%
<i>Gender</i>						
Female	17	77.3%	38	64.4%	55	67.9%
Male	4	18.2%	21	35.6%	25	30.9%
Other	1	4.5%	—	—	1	1.2%
<i>Ethnicity</i>						
Non-Latino White	16	76.2%	36	66.7%	52	69.3%
Latino	5	23.8%	18	33.3%	23	30.7%
<i>Race</i>						
White	11	55.0%	45	76.3%	56	70.9%
Black	4	20.0%	9	15.3%	13	16.5%
Asian	1	5.0%	3	5.1%	4	5.1%
Native American/ Alaskan Native	1	5.0%	—	—	1	1.3%
Other	3	15.0%	2	3.4%	5	6.3%
<i>Level of Education</i>						
Some College	16	72.7%	3	5.0%	19	23.2%
College Degree	3	13.6%	11	18.3%	14	17.1%
Some Graduate	2	9.1%	2	3.3%	4	4.9%
Graduate Degree	1	4.5%	42	70.0%	43	52.4%
Other	—	—	2	3.3%	2	2.4%
<i>Campus Interactions</i>						
Do Not Interact	6	27.3%	6	10.0%	12	14.6%
Rarely Interact	9	40.9%	21	35.0%	30	36.6%
Sometimes Interact	—	—	13	21.7%	13	15.9%
Often Interact	1	4.5%	4	6.7%	5	6.1%
I'm Not Sure	6	27.3%	16	26.7%	22	26.8%
<i>Relational Affiliations</i>						
None	10	45.5%	4	6.7%	14	17.1%
Family Member	3	13.6%	11	18.3%	14	17.1%
Personal Relation	2	9.1%	16	26.7%	18	22.0%
Both	7	31.8%	29	48.3%	36	43.9%

*Note. Percentages do not always add up to 100% due to missing data.

Figure 1

Changes in Knowledge Assessment Scores Based on University Affiliation



APPENDIX A:
RECRUITMENT NOTICE

Dear [prospective participant title and name]:

I hope this email finds you well. I am a doctoral candidate in the Counseling Psychology program at the University currently working with Dr. X to facilitate student, staff, and faculty participation in *Green Zone*, a diversity training to support student service members and veterans on campus. I am writing to invite you to participate in the training, which will cover a broad range of topics relevant to understanding, supporting, and promoting the inclusivity of student service members and veterans on campus. I will be facilitating the training along with two student veterans as a part of my dissertation project, which is aimed at developing and refining Green Zone for implementation at the University.

As the [title] of the [department, program, organization name], I believe individuals in your [department, program, organization] would benefit from the training and have much to contribute to the study. Your participation and feedback on the training may help promote a more inclusive campus climate for student service members and veterans in the future. Lunch will also be offered to all study participants following the training.

To participate, please respond to this email so that we can further discuss your interest and your [department/program/organization]'s participation in the training. I hope to hear from you in the near future.

Sincerely,

APPENDIX B:

INFORMED CONSENT

[University Name]

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Green Zone: Developing and Refining a Training to Support Student Service Members and Veterans

The following information describes the research study in which you are being asked to participate. Please read the information carefully. At the end, you will be asked to sign if you agree.

PURPOSE OF STUDY: You are being asked to be in a research study. The purpose of this study is to evaluate *Green Zone*, a diversity training that provides information about student Service Members and Veterans.

PROCEDURES: You will first be asked to fill out questions about yourself and your knowledge of military and student veterans. You will then be asked to participate in the Green Zone training. After the training, you will be asked to provide feedback on Green Zone during a group discussion. At the end of the discussion, you will be asked to complete questions about your knowledge of military and student veterans for a second time. All study procedures will take no more than 3 hours. With your permission, the training and discussion groups will be audio recorded.

COSTS: There are no costs associated with your participation in this study.

RISKS AND/OR DISCOMFORTS: There are no known risks associated with your participation in this study. You can refuse to answer a question or stop being in the project at any time.

BENEFITS: No direct benefit is promised to you. By participating in this study, you may learn more about students who are in the military and student veterans. The information you provide may help improve the experiences of student service members and veterans on campus.

CONFIDENTIALITY: The written materials will not have your name on them. You will not be asked to state your name at any point during the training or group discussion. We ask that you keep information discussed during the study private; however, we cannot guarantee that other group members will keep your information private. Once the study is finished, all tapes of the trainings and group discussions will be destroyed.

COMPENSATION: No direct compensation will be offered for your participation in this study. However, lunch will be offered to all study participants. Research credits for eligible students may be provided.

RIGHT TO WITHDRAW: Your participation in this study is voluntary. You are free to say no or leave at any time.

CONTACT INFORMATION: If you have any questions or concerns regarding the purpose, procedures, and outcome of the project, please feel free to contact the Primary Investigator, Kari Weiterschan, at K.weiterschan@umiami.edu or (xxx) xxx-xxxx, or the Primary Responsible Investigator, Lydia P. Buki, at L.buki@miami.edu, or (305) 284-2230. If you have questions about your rights as a research subject you may contact Human Subjects Research Office at the University at (305) 243-3195.

PARTICIPANT AGREEMENT:

I have read the information in this consent form and agree to take part in this study and be audio taped for the group discussion. I have had the chance to ask any questions I have about this study, and they have been answered for me. I am entitled to a copy of this form after it has been read and signed.

Signature of Participant

Date

Name of Participant

Signature of person obtaining consent

Date

Name of person obtaining consent

APPENDIX C:
DEMOGRAPHIC QUESTIONNAIRE

Age: _____

Gender: ___ Male ___ Female ___ Other Gender/Ungendered

Ethnicity:

___ Latino/a
___ Non-Latino/a

Race:

___ White
___ Black
___ Asian American
___ Native American/Alaskan Native
___ Other: _____

Highest Level of Formal Education Completed:

___ Less than a High School Degree or GED
___ Some College
___ College Degree
___ Some Graduate School
___ Graduate Degree
___ Other: _____

Are you a Service member or Veteran?

___ Yes
___ No

If you are a student, please complete the information on pages 2, 3, and 4:

Major: _____

Enrollment Year: _____

Are you affiliated with any student organizations on campus?

☐ Yes

☐ No

If yes, please list the student organizations you are currently affiliated with:

Do you interact with student Service Members or Veterans (SMVs) on campus?

☐ Yes

☐ No

☐ I am not sure

If yes, to what extent do you interact with student SMVs on campus?

☐ Rarely (at least once a month)

☐ Sometimes (at least once a week)

☐ Often (daily)

☐ I am not sure

If yes, in what contexts do you interact with student SMVs on campus? Select all that apply.

☐ I interact with student SMVs in courses I have taken or are currently taking.

☐ I interact with student SMVs at my campus job or work study.

☐ I interact with student SMVs in campus organizations am affiliated with.

☐ I interact with student SMVs at events sponsored by the university or my department/program.

☐ I interact with student SMVs socially, as a function of personal relationships I have with them.

☐ I interact with student SMVs for some other reason:

Do you have any immediate or extended family members who are serving in the military or identify as a Veteran?

☐ Yes

☐ No

If yes, please indicate the nature of your relationship with them and their branch of service:

- | | |
|--|---|
| <input type="checkbox"/> Parent | <input type="checkbox"/> Marine Corps |
| <input type="checkbox"/> Sibling | <input type="checkbox"/> Army |
| <input type="checkbox"/> Spouse | <input type="checkbox"/> Air Force |
| <input type="checkbox"/> Grandparent | <input type="checkbox"/> Navy |
| <input type="checkbox"/> Aunt or Uncle | <input type="checkbox"/> Coast Guard |
| <input type="checkbox"/> Cousin | <input type="checkbox"/> National Guard |
| <input type="checkbox"/> Other | <input type="checkbox"/> I Don't Know |

Do you have any personal relationships (e.g., friend, coworker, roommate, acquaintance) with individuals who are serving in the military or identify as a Veteran?

☐ Yes ☐ No

If yes, please indicate the nature of your relationship with them and their branch of service:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Friend | <input type="checkbox"/> Marine Corps |
| <input type="checkbox"/> Coworker | <input type="checkbox"/> Army |
| <input type="checkbox"/> Roommate | <input type="checkbox"/> Air Force |
| <input type="checkbox"/> Acquaintance | <input type="checkbox"/> Navy |
| <input type="checkbox"/> Other | <input type="checkbox"/> Coast Guard |
| | <input type="checkbox"/> National Guard |
| | <input type="checkbox"/> I Don't Know |

If you are a University staff or faculty member, please complete the information on pages 5 and 6:

Occupational Title: _____
How long have you served in this role? _____

Do you interact with student Service Members or Veterans (SMVs) on campus?

☐ Yes
☐ No
☐ I am not sure

If yes, to what extent do you interact with student SMVs on campus?

☐ Rarely (at least once a month)
☐ Sometimes (at least once a week)
☐ Often (daily)
☐ I am not sure

If yes, in what capacity do you interact with student SMVs on campus? Check all that apply.

- ☐ I interact with student SMVs as a function of my job requirements.
☐ I interact with student SMVs as a function of university activities I participate in (e.g., committees, organizations, campus events).
☐ I interact with student SMVs in my classroom, department, or program.
☐ I interact with student SMVs socially, as a function of personal relationships I have with them.
☐ I interact with student SMVs for some other reason:
-

Do you have any immediate or extended family members who are serving in the military or identify as a Veteran?

☐ Yes ☐ No

If yes, please indicate the nature of your relationship with them and their branch of service:

- | | |
|--|---|
| <input type="checkbox"/> Parent | <input type="checkbox"/> Marine Corps |
| <input type="checkbox"/> Sibling | <input type="checkbox"/> Army |
| <input type="checkbox"/> Spouse | <input type="checkbox"/> Air Force |
| <input type="checkbox"/> Grandparent | <input type="checkbox"/> Navy |
| <input type="checkbox"/> Aunt or Uncle | <input type="checkbox"/> Coast Guard |
| <input type="checkbox"/> Cousin | <input type="checkbox"/> National Guard |
| <input type="checkbox"/> Other | <input type="checkbox"/> I Don't Know |

Do you have any personal relationships (e.g., friend, coworker, acquaintance) with individuals who are serving in the military or identify as a Veteran?

☐ Yes ☐ No

If yes, please indicate the nature of your relationship with them and their branch of service:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Friend | <input type="checkbox"/> Marine Corps |
| <input type="checkbox"/> Coworker | <input type="checkbox"/> Army |
| <input type="checkbox"/> Acquaintance | <input type="checkbox"/> Air Force |
| <input type="checkbox"/> Other | <input type="checkbox"/> Navy |
| | <input type="checkbox"/> Coast Guard |
| | <input type="checkbox"/> National Guard |
| | <input type="checkbox"/> I Don't Know |

APPENDIX D:
FOCUS GROUP INTERVIEW GUIDE

Please feel free to use the training packet and ratings you indicated to guide your responses to the questions we ask during this discussion.

Question 1

What are your overall impressions of the training?
Strengths?
Weaknesses?

Question 2

Do you feel the information provided in the training enhanced your understanding of student veterans? If so, how? OR Please comment on knowledge gained during the training that you did not previously have.

Question 3

Was there any information that you felt I should have included in the training that was not included? Please elaborate.

Question 4

What were your impressions of how the training materials were organized? Please comment on the overall flow of the material. Would a different sequence of information be more effective? Is there some information you would have wanted to have earlier in the presentation, to better understand the information presented?

Question 5

Was there any information presented that you feel should not have been? Please elaborate.

Question 6

Do you anticipate using the information you were provided during the training? If so, how?

In your interactions with student veterans?
In your organization, office, department, or service provision?

Question 7

What was your overall experience rating the training components?

Question 8

Do you have any other impressions or suggestions on how we can enhance the training that you have not already indicated? Please elaborate.