# VETERAN AND MILITARY-CONNECTED STUDENTS' EXPERIENCES IN COLLEGE

by

**Karen Miller**

**A Dissertation**

*Submitted to the Faculty of Purdue University*

*In Partial Fulfillment of the Requirements for the degree of*

**Doctor of Philosophy**


Department of Educational Studies

West Lafayette, Indiana

August 2019

# THE PURDUE UNIVERSITY GRADUATE SCHOOL
# STATEMENT OF COMMITTEE APPROVAL

Dr. Heather SErvaty-Seib, Chair

Department of Educational Studies

Dr. Asye Çifçti

Department of Educational Studies

Dr. Eric D. Deemer

Department of Educational Studies

Dr. Nicholas J. Osborne

Veteran, Lieutenant of U.S. Coast Guard

**Approved by:**

Dr. Richard Olenchak

Head of the Graduate Program

*To my children, reach for the stars and always follow your dreams.*

# ACKNOWLEDGMENTS

I want to acknowledge my family and friends for supporting me in this process. I could not have done this without you. In particular, my husband and children. Thank you for your support, love, and patience in this process. Also, to my mother for always being a constant rock in my life. I also want to acknowledge the faculty of the Counseling Psychology Department at Purdue. In particular, Dr. Heather Servaty-Seib for her continued support and challenge in my time in the program.

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# ABSTRACT

Author: Miller, Karen, A. Ph.D.
Institution: Purdue University
Degree Received: August 2019
Title: Veteran and Military-connected Students' Experiences in College
Committee Chair: Heather L. Servaty-Seib

The United States spent nearly 12 billion dollars on veteran education benefits in 2018 to support the approximately 900,000 military-connected students that accessed educational benefits (U.S. Department of Veterans Affairs, 2019). In reference to prior research, veteran and military-connected students reported issues with discrimination based on their military status, incongruence in navigating cultural differences, and perceptions of loss related to their college experience. To more efficiently use the billions of dollars slated for their education, institutions must addresses the issues that may affect veteran and military-connected students' time in college. Participants for this study were 184 veteran and military-connected students from institutions across the United States, primarily from the Midwest. Results from the study indicated there was a relationship between the gains veteran and military-connected students associated with their experiences in college with their life satisfaction and likelihood to persist. No relationships emerged between perceived discrimination or cultural congruence and life satisfaction and likelihood to persist. Whereas differences also did not emerge among gender, race and ethnicity, and sexual orientation in this study, these results are likely due to underrepresentation and may not reflect the true experiences of veteran and military-connected students of minority statuses. The relationships that emerged between college-related gains and life satisfaction and likelihood to persist suggest that the appraisal of gains is an important factor for the well-being and educational attainment of veteran and military-connected students and could serve as a point for intervention.

*Keywords*: veterans, military, discrimination, culture, college-related gains

# CHAPTER I. INTRODUCTION

## Overview of the Problem

The population of veteran and military-connected college students in the United States (U.S.) has steadily increases each year, such that veteran and military-connected students accounted for approximately 5% of the college student population in 2011-2012 (U.S. Department of Education, 2016). According to the U.S. Department of Veterans Affairs (2019), the U.S. Government invested nearly 12 million dollars in 2018 to support nearly 900,000 service members who participated in education programs (e.g., tuition assistant, adult education, counseling). Given the high numbers of students and the large investment in educational benefits, it is imperative that institutions adequately support veteran and military-connected students' college endeavors to ensure efficient use of taxpayer funds. It is also crucial that this student population is supported to not only survive but also to thrive in their time in higher education.

Veteran and military-connected students are non-traditional students, particularly in terms of life-experience, and have unique challenges regarding their overlapping identities as service members and students. More than not, veteran and military-connected students are the first-generation in their families to go to college (61.8%; Kim & Cole, 2013), which classifies them as an at-risk population. Anecdotal evidence and empirical data regarding veteran students' experiences indicate they can feel marginalized by faculty and peers (Ackerman, DiRamio, & Garza Mitchell, 2009). Veteran and military-connected students report feeling uncomfortable with politicized conversations that do not align with their views or identity as service members and also recall discriminatory comments made about them within the context of such conversations (DiRamio, Ackerman, & Mitchell, 2008; Gonzalez & Elliot, 2013; Gordon, 2010;

Osborne, 2013). Considering that discrimination (e.g., discriminatory comments) for students in general negatively affect college persistence (Fischer, 2007; Nora & Cabrera, 1996; Peart-Forbes, 2004), this may also be the case for veteran and military-connected students.

Moreover, Raybeck (2010) suggested that the transition from the military culture to higher education culture might create confusion and difficulty for veteran and military-connected students. Veteran and military-connected students are more likely than their non-military peers to be married (U.S. Department of Education, 2016), and likely experience a convergence of multiple cultural identities (e.g., intersectionality of parent, employee, student) that can be challenging to navigate (Osborne, 2013; Somers, Woodhouse, & Coffer, 2004). In the process of advancing in education, veteran and military-connected students are expected to join a cultural environment that may be foreign due to the differences between their prior (or concurrent) military culture, their key demographic characteristics (e.g., gender, race and ethnicity, sexual orientation), and their new higher education culture (Kuh & Whitt, 1988; Raybeck, 2010). More specifically, the structure of academia can be loose in comparison to the strict structure and relationship boundaries in the military (Ackerman et al., 2009; Raybeck, 2010). In addition, the military expects "task cohesion" (p. 36) among its personnel, which requires a sense of de-individuation (Naphan & Elliot, 2015); whereas, higher education expects students to seek out individuality and autonomy (Chickering & Reisser, 1993; Naphan & Elliot, 2015). Furthermore, higher education culture often respects and encourages questioning and freedom of inquiry, whereas military culture is marked by obedience and honor to country (Raybeck, 2010). Although veteran and military-connected students are *not* incapable of critical thinking, their military education may not have prepared them for the conceptualizations that higher education demands (N. Osborne, personal communication, March 15, 2016). In actuality, Weber (2012)

found that cultural congruity was the most powerful predictor of veteran and military-connected student' persistence decisions beyond social support, combat and post-battle experiences, and reasons for enlisting.

Veteran and military-connected students' cultural confusion and isolation can limit their feelings of belongingness to the institution, which is related to their social integration and may be related to their college-related gains, life satisfaction, and likelihood to persist. Hurtado and Carter (1997) asserted that belongingness parallels Tinto's conception of integration but that belongingness more accurately describes marginalized students' experiences. The concept of belongingness relates to students outcomes in many ways. In particular, Miller and Servaty-Seib (2016) found that first-year, traditional aged college students' perceptions of existential and friendship losses were negatively associated with their sense of belongingness to their academic institution. Hurtado and Carter (1997) found that third-year students who perceived a tense racial climate reported a lower sense of belonging. In their review of student engagement, Kim and Cole (2013) found that veteran and military-connected students reported a lower sense of belongingness than their civilian peers. Additionally, Osborne (2013) found that veteran and military-connected students felt disconnected from their peers because they sensed a lack of maturity on the part of their peers, had more commitments with family, and felt a sense of loss in their departure from the military.

Past findings have indicated that non-tradition students (e.g., veteran and military-connected students) do not necessarily need to have strong social integration (e.g., developing friendships on campus) in college to persist Bean & Metzner, 1985; Davidson & Wilson, 2013;Van Dusen, 2011). However, Van Dusen (2011) did find that when veterans perceived their campus culture to be veteran friendly (e.g., respect veteran status), they were more likely to

persist. Therefore, veteran and military-connected students who perceive less discrimination and more cultural congruity may have a higher likelihood to persist. For the non-traditional veteran and military-connected students, those who have a lower sense of cultural congruity may feel less belonging and integration. Additionally, it is likely that they experience similar and additional losses to their traditional first-year peers, such as loss of career, which may be connected with both their life satisfaction and their likelihood to persist in college.

I used two theories in my conceptualization of veteran and military-connected students' experiences within higher education. First, I review Tinto's (1975; 1993) theory of student departure, which posits that students' interactions with and integration into social and academic communities are chiefly related to their decisions to persist (DiRamio & Jarvis, 2011). This theory connects to the discrimination veteran and military-connected students may perceive in relation to their military cultural identity and the level of cultural congruence they perceive in the institutional environment. Moreover, Tinto (1975; 1993) suggests that when students make goal commitments to their own scholarship and to the institution they use a process of evaluating the costs and benefits in relation to the college experience. These goal commitments can also have a bearing on the decisions to persist. Congruent with the cost benefit analysis, I use Servaty-Seib's (2014) gain/loss framework to conceptualize the gains veteran and military-connected students' relate to being in college. In particular, one of the assumptions of this framework is that perceived gains are positively associated with positive outcomes (e.g., happiness) and perceived losses are positively associated with negative outcomes (e.g., sadness). Thus, there should be a positive relationship between gains associated with the being in college and veteran and military-connected students' life satisfaction and likelihood to persist in college.

**Importance of Study**

Qualitative and descriptive scholarship about veteran and military-connected students in higher education exists; however, there is limited quantitative research regarding these students' subjective experiences while in college. Moreover, in a study conducted by NASPA, the Student Affairs Administration in Higher Education, and InsideTrack on the success of student veterans, only 30% of the institutions that responded were gathering information about veteran and military-connected students' retention and only 25% of institutions that responded reported having a good idea about the reasons veteran and military-connected students left their institutions (Sponsler, Wesaw, & Jarrat, 2013). Most of the institutions that responded were 4-year public (51.9%) or private (33.5%) institutions, with only 13.8% from public 2-year schools. The current study represents an important contribution to the existing qualitative research by offering quantitative findings from a larger sample of veteran and military-connected students. Specifically, I used quantitative measures of variables (e.g., perceived discrimination, cultural congruity) that have emerged in the qualitative research. The current study highlights challenging interactions veteran and military-connected students encounter in their institutions, and the cultural similarities and differences between the military and higher education cultures. In addition, in the current study I focused on veteran and military-connected college students' subjective experience with gains related to their college experiences. I also examined how the domains of perceived discrimination, cultural congruity, and college-related gains may be related to life satisfaction and the likelihood to persist.

The findings not only provide guidance for campuses as they create transitional and support programs and interventions targeted at veteran and military-connected populations, but they could also inform the work of the Veterans Administration and Student Veterans of America in helping to better prepare veteran and military-connected students for success in

higher education. The results also provide important information relevant to the development of programming for multiple units; programming that could facilitate environments that are veteran friendly and aware of cultural challenges for veteran and military-connected students. For example, personnel working with veteran and military-connected students during their transition to and while they are in college could focus on the gains and losses these students might experience in college. Preparing these students for the types of gains and losses they might encounter could enhance the likelihood of them thriving in college. The findings of this study provide information that could benefit the students themselves by normalizing their experiences and helping them to be aware of the barriers that could prevent their success. These students have provided an imperative and difficult service to the U.S. and deserve assistance to help guide them in their transition to a new career. To ensure the billion dollars slated for veteran and military-connected student education would be used effectively, veteran and military-connected students need to be supported to be successful and prosper in higher education.

**Statement of Purpose**

The purpose of this study was to build upon the existing qualitative and limited quantitative literature in order to quantitatively examine particular experiences and perceptions (i.e., discrimination, cultural congruity, college-related gains) of veteran and military-connected students in relation to their life satisfaction and likelihood to persist. More specifically, I was interested in whether the discrimination that veteran and military-connected students perceive in college, in regard to their military identity, relates to their overall life satisfaction and likelihood to persist. In addition, as they navigate this new cultural climate of higher education, I was interested in knowing if veteran and military-connected students' perceived cultural congruence with the institution relates to their life satisfaction and likelihood to persist. Moreover, as veteran

and military-connected students weigh the costs and benefits of being in college, I was interested to know if the gains they associated with college related to their life satisfaction and likelihood to persist. In addition, I wanted to explore the interactions between key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) and veteran and military-connected students' perceived discrimination, cultural congruity, and college-related gains and how those interactions may moderate the relationship with life satisfaction and the likelihood to persist.

The results of the current study include (a) information about the intersections between key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) and the experiences of veteran and military-connected students; (b) quantitative data regarding the relationship between veteran and military-connected students' experiences (i.e., perceived discrimination, cultural congruity, college-related gains) and their life satisfaction and likelihood to persist; and (c) guidance regarding points of intervention (e.g., faculty and staff awareness) for campuses to better serve veteran and military-connected students.

**Terminology and concepts**

Throughout this study, I used terms that may be unfamiliar to readers. In order to clarify those terms, I provide some definitions.

- The term *veteran and military-connected students* referred to students who are veterans, retirees, previous service members, or active duty members of any U.S. military branch, Reserves, or National Guard. Below, I offer a more thorough description of this definition.
- I used the term *perceived discrimination* to refer to the discrimination or prejudice that veteran and military-connected students perceived in regard to their military identity status.

- I used the terms *cultural congruity* or *cultural congruence* interchangeably to refer to the perceived level of balance or fit between the beliefs, values, and expectations for behavior in the multiple cultural identities that students espouse (Gloria & Robinson Kurpius, 1996). In this study I specifically identified military and higher education cultures.
- I used the term *likelihood to persist* due to the cross-sectional nature of this study. Because this study was not longitudinal, I did not assess persistence, but rather participants' intention or likelihood to persist.
- *Sexual orientation* is defined as the "enduring pattern of emotional, romantic and/or sexual attractions" felt among people (American Psychological Association [APA], n.d., para. 1).
- The term gay can refer to all people "whose enduring physical, romantic, and/or emotional attractions are to the people of the same sex" (GLAADa, n.d., para. 2). However, the term *lesbian* is more often used for women who are attracted to other women (GLAADa, n.d.); therefore, in this study *gay* referred to men who are attracted to other men. The term *bisexual* referred to people who have the "capacity to form enduring physical, romantic, and/or emotional attractions to those of the same gender or to those of another gender" (GLAADa, n.d., para. 4).
- The letters in the acronyms used for sexual orientation in the literature (i.e., *LGB, LGBT, GLBT, LGBTQ, LGBTQA*) refer to *lesbian (L*), *gay (G), bisexual (B*), *transgender (T),* and *questioning* or *queer (Q*) people. The "*A*" refers to *allies* of LGBTQ communities. However, transgender is not a sexual orientation identity and, therefore, was not included

in the section on sexual orientation. See the section on gender identity for a brief review regarding transgender service members and students.

- The term *queer* is "used by some people…whose sexual orientation is not exclusively heterosexual. Typically, for those who identify as queer, the terms *lesbian*, *gay*, and *bisexual* are perceived to be too limiting and/or fraught with cultural connotations they feel don't apply to them" (GLAADa, n.d., para. 5).
- I used the term *queer-spectrum* to identify students and participants who identified as gay, lesbian, bisexual, or questioning (Greathouse et al., 2018).
- The term *transgender* is "an umbrella term for people whose gender identity and/or gender expression differs from what is typically associated with the sex they were assigned at birth" (GLAADb, n.d., para. 5). However, that term may be limiting and some have used *trans-spectrum* as more inclusive of the diversity of gender identities (Greathouse et al., 2018).
- The term *cisgender* is "used by some to describe people who are not transgender. 'Cis-' is a Latin prefix meaning 'on the same side as,' and is, therefore, an antonym of 'trans-.' A more widely understood way to describe people who are not transgender is simply to say *non-transgender people.* (GLAADb, n.d., para. 12)."
- *Intersect, intersections,* or *intersectionality* are the terms used to describe "mutually constitutive relations among social identities" (Shields, 2008, p. 301). I used an intersectional approach as it recognizes that sociocultural power and privilege shape people's experiences as related to their intersecting identities (Parent, DeBlaere, & Moradi, 2013; Shields, 2008). In the case of this study, I addressed the intersections

between military identity and potentially marginalized communities, particularly those who identify as a woman, racial and ethnic minority, or sexual orientation minority.

**Veteran and Military-Connected Students Defined**

It is challenging to identify a term that adequately describes individuals who (a) have served or are currently serving in the U.S. military, and (b) are also students in a higher education setting. Vacchi (2012) uses the term "student veteran" to describe students who are or were active duty, National Guard, or Reservists. He explains that this term is the most widely used term and is applied to student veterans despite their "combat experience, legal veteran status, or GI Bill use" (p. 17). However, as Vacchi argues, "veteran" is a legal term used to identify "a person who served in active military, naval or air service, and was discharged or released under conditions other than dishonorable" (U.S. Department of Veterans Affairs, 2017, para. III.ii.6.A.1.a.). He adds that the use of student "veteran" may not encompass those who are currently serving, have retired, or have been dishonorably discharged, which is an important point, as many people who have identified as LGBT in the military have been dishonorably discharged (Miller & Cray, 2013). Therefore, the term "veteran" does not encompass the fullest range of statuses that are possible in connection with military involvement. Brown and Gross (2011) use the term "military student" to define those students who are "active duty, National Guard, or retired military, or a spouse or primary dependent on one of these students" (p. 46). Whereas, this term encompasses those currently serving in the military, it misses veteran students who served in the past. In addition, the idea that it includes spouses and dependents does not fit with the focus of the present study.

I decided to use the term "veteran and military-connected students" to refer to students who are veterans, retirees, previous service members, or active duty members of any U.S.

military branch, National Guard, or Reserves. As with Vacchi's (2012) term of "student veteran," this term applies to all service members regardless of deployment status, combat experience, and GI Bill use. This term is inclusive of all people who have spent any time serving in the U.S. military; such inclusivity is aligned with the purposes and aims of the current study. However, the term does not include family members of those who have served, as they were not the focus of the present study.

**Relevance to Counseling Psychology**

In this section, I enumerate ways in which the current study aligns with the values and traditions of counseling psychology. This study is consistent with counseling psychology's history and present emphasis on multiculturalism, as well as its defining roles and unifying themes. In addition, supporting the veteran and military-connected student population is relevant to the problem settings in which counseling psychologists generally work.

The field of Counseling Psychology developed out of work with veterans and military personnel (Gelso, Nutt Williams, & Fretz, 2014; Heppner, Leong, & Chao, 2008), and this work continues to align with the field's emphasis on social justice and multiculturalism (Peterson & Elliot, 2008; Speight & Vera, 2008). In particular, work with this population focuses on vocational rehabilitation and issues concerning disability services (Peterson & Elliot, 2008). In fact, 3.8 million veterans in 2014 had a service related disability (U.S. Census Bureau, 2015). Additionally, veterans, in particular, have obtained protected status and both veterans and military-connected students have unique life experience, which identifies them as a group of particular interest in social justice work (Motulsky, Gere, Saleem, & Trantham 2014; Speight & Vera, 2008). In particular, and related to this study, counseling psychologists are acutely aware of the effects that discrimination has on people, particularly those from marginalized

communities (Constantine, Hage, Kindaichi, & Bryant, 2007). Additionally, from a multicultural perspective, defining culture broadly to include affiliations allows for a more inclusive and holistic approach to individuals' lived experiences (Pedersen, 1991). Although veteran and military service members as a whole may not be marginalized in the wider civilian society, I argue that the vast differences in the cultural organization between the military and higher education creates an environment that may ostracize veteran and military-connected students. Counseling psychologists are connected to work that acts to combat discriminatory experiences in all sectors. Additionally, in this study I addressed commonly marginalized groups (i.e., women, racial and ethnic minorities, sexual orientation minorities) and identify how the intersectionality of these key demographic characteristics and the experiences of veteran and military-connected students relate to their life satisfaction and likelihood to persist.

Counseling psychology has three distinct defining roles: remedial, preventative, and educative-developmental and the present study can help inform interventions for veteran and military-connected students that align with each role. Remedial interventions focus on rectifying issues that are interfering with people's functioning (Gelso et al., 2014). For example, if perceived discrimination is negatively related to students life satisfaction and likelihood to persist, counseling psychologists can specifically speak to the alienation that veteran and military-connected students feel and can help them find resources for support on and off campus. More specifically, counseling psychologists may connect veteran and military-connected students with specific support groups or communities based on intersections of their personal experience (i.e., women veterans groups, American Veterans for Equal Rights). Preventative interventions focus on intervening with problems before they may occur (Gelso et al., 2014). For example, if the findings from this study indicate that cultural congruity positively relates to

veteran and military-connected students' life satisfaction and likelihood to persist, student services personnel could create workshops to educate students about the cultural differences between the military and higher education in order to support their understanding about the higher education landscape and ease their transition and overall experience in college. Educative-developmental interventions focus on educating and discovering their potential (Gelso et al., 2014). For example, if college-related gains positively relate to life satisfaction and likelihood to persist, counseling psychologists can use a strengths-based perspective to help veteran and military-connected students identify areas of possible gains in order to encourage and cultivate those areas subsequently stimulating future happiness and retention. Moreover, veteran services offices can use the current findings to create educative and developmental workshops and programming that assists veterans and military-connected students in enhancing their skills as they navigate the higher education landscape (e.g., FREE 4 VETS, Danish & Antonides, 2009; Danish & Forners, 2008; Gelso et al., 2014).

This study focused on four specific unifying themes of counseling psychology: strength-based approaches, person-environment interactions, multiculturalism, and educational and career development (Gelso et al., 2014). Counseling psychologists are particularly interested in supporting and understanding people throughout the lifespan using a positive and growth-focused approach to human development (Danish & Forners, 2008; Gelso et al., 2014; Steenbarger, 1990). In particular, focusing on issues across the lifespan, particularly related to the college experience, counseling psychologists can use a strengths-based perspective to work with veteran and military-connected students to enhance their perceived college-related gains, which could promote greater life satisfaction. In addition, this study focused on the person-environment fit of veteran and military-connected students as they interact with the collegiate

environment. The findings from this study can offer information about the potential discrimination veteran and military-connected students may perceive in college because of their military identity. Moreover, this study focused on the multicultural factors present in navigating the potentially different cultural domains of higher education and the military, and examines how the intersections of gender, race and ethnicity, and sexual orientation within this population may relate to life satisfaction and persistence outcomes. As the population of military-connected students grows in higher education, it will be important to understand their cultural context in order to fully support their growth and promote positive experiences in college. Lastly, this study focuses on supporting educational and career development by offering a better understanding regarding the persistence intentions of veteran and military-connected students, which could help guide retention efforts. It is important to retain veteran and military-connected students so that they can complete their college education and thus have more job opportunities once they are no longer employed by the military.

Counseling psychologists take on many roles and work in variety of settings including, but not limited to, Veterans Administration offices and college counseling centers (Gelso et al., 2014). Likely, veteran and military-connected students will obtain services from college counseling centers. Therefore, counseling psychologists working in counseling centers need to have knowledge about this particular student population. The findings from this study will provide information for counseling psychologists working in college settings to create evidenced-informed interventions that directly supports this student population (Danish & Antonides, 2009).

# CHAPTER II. REVIEW OF LITERATURE

The purpose of this study was to quantitatively examine the relationships between veteran and military-connected students' college-related experiences (i.e., perceived discrimination, cultural congruity, college-related gains) and their life satisfaction and likelihood to persist. Specifically, I examined the key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) that may intersect with veteran and military-connected students' experiences. I also determined whether perceived discrimination, cultural congruity, and college-related gains were associated with the life satisfaction and likelihood to persist of veteran and military-connection students.

In this chapter, I offer theoretical and empirical material relevant to the present study and important to the building of the rationale for my research questions and hypotheses. I begin with a review of veteran and military-connected students' experiences in college as related to the non-traditional student experience, and examining the connection between military service and education and sociocultural factors. I then explain how the military and higher education operate as distinct cultures and how different key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) intersect with these cultures. I then offer an explanation of the theories I used to conceptualize this study and review the scholarly information on veteran and military-connected students' experiences related to the purpose of this study (i.e., perceived discrimination, cultural congruity, college-related gains). I conclude with my research questions and hypotheses.

## Veteran and Military-Connected Students

In this section, I review the limited scholarly literature focused on the experiences of veteran and military-connected students engaged in higher education. I first describe how these students compare with other non-traditional student populations. I then briefly explain the socio-cultural factors that may lead men and women to serve in the military.

### Veteran and Military-Connected Students as Non-Traditional Students

The National Center for Education Statistics (NCES, n.d.) explains that non-traditional students are a, "population of adult students who often have family and work responsibilities as well as other life circumstances that can interfere with successful completion of educational objectives" (para 1). The center further purports that variables such as age, race, gender, residence, level of employment, and non-degree program enrollment characterize the non-traditional student (NCES, n.d.). Additionally, Bean and Metzner (1985) argued that three factors are most important in defining a non-traditional student's experience: residence, age, and enrollment status. Living off campus and commuting could be aspects of the non-traditional student experience (Bean & Metzner, 1985). Additionally, they surmise that non-traditional students are generally older and may attend classes only part-time due to other commitments. They expand upon the age aspect to explain that the age of students was not as relevant as the experiences that often come with age including family obligations, job employment, and possibly higher levels of absences (Bean & Metzner, 1985).

Veteran and military-connected students meet the criteria of non-traditional students due to their family responsibilities, potential job duties, and enrollment status. Whereas veteran and military-students tend to be of similar age ranges as independent undergraduate students (e.g., over 24, married, financial aid independent), they tended to be older than traditional, dependent

undergraduate students (i.e., average age, 34 military, 32 non-military independent, 20 non-military dependent; U.S. Department of Education, 2016). Veteran and military-connected students also tend to have more family commitments and are married at higher rates than their undergraduate non-military peers (45.9% military, 33.3% non-military, U.S. Department of Education, 2016). Similarly, veteran and military-connected graduate students tend to be older and married at higher rates than their non-military peers (i.e., 39, 63.2%; 32, 39%, respectively). Veteran and military-connected students also tend to have higher rates of absenteeism due to service calls while enrolled, particularly students who are in the guard or reserves (Ackerman et al., 2009; DiRamio et al., 2008; Heath, 2010; Vacchi, 2012). Moreover, veteran and military-connected students may have increased work obligations if still connected to jobs in the military or other employment that supports their financial needs. Additionally, veteran and military-connected students are enrolled part-time at higher rates than their non-military, traditional student peers but at similar rates as their civilian, non-traditional peers (e.g., 60.2% military undergrads; 65.9% non-military, non-traditional undergrads; 29.9% non-military, traditional undergrads; Radford & Wun, 2009).

**Sociocultural Factors Related to Military Service**

In a review of the literature, factors such as race and ethnicity, socioeconomic status (SES), and personal and parental academic achievement were all factors that may influence the decision to serve in the military. Specifically, and in alignment with national data, Bachman, Segal, Freedman-Doan, and O'Malley (2000) found that men who serve are disproportionately from racial and ethnic minority groups. Wang, Elder Jr., and Spence, (2012) found that Black men were more likely to join the military with occupational motivations than were non-Hispanic

White men, which aligns with Lutz's (2008) contention that racial and ethnic groups may serve at a higher rate to enhance opportunity and status.

Moreover, military service may act as a path to higher education and as a means to enhance sociocultural position. Researchers found that service members from lower socioeconomic conditions or childhood poverty were more likely to serve than those from higher socioeconomic conditions (Bareis & Mezuk, 2016; Lutz, 2008). Wang, et al. (2012) suggest that the motivation to serve in the military may be due to the socioeconomic benefits, including skills building, college tuition, and more access to a college degree. Lutz (2008) also contends that military service might increase social condition and status through more career opportunities for people with a lower family income.

Furthermore, personal and parental education and aspirations appear to be factors in the decision to serve in the military (Bachman et al., 2000; Wang et al., 2012). Bachman et al. (2000) found that college plans and higher grades were negatively associated with enlistment; whereas having parents with low education level was positively associated with enlistment in the military. Additionally, Wang et al. (2012) found that military service was most likely for those with high cognitive ability and low academic achievement, which the researchers suggested may be linked to the desire to fulfill their potential through enlistment.

## Cultural Aspects of Military and Higher Education

To better understand the concept of culture as it relates to the military and to higher education, I offer a broad view of culture and then specify the ways in which each are unique cultures. I then offer a brief review of the differences between military culture and civilian society, broadly, and the prominent contrasting elements that emerge when comparing the cultures of the military and higher education, specifically. I conclude by highlighting the cultural

intersections between both military and higher education cultures and the key demographic characteristics of gender, race and ethnicity, and sexual orientation. Having a solid understanding of the cultural facets of the military and higher education as well as how key demographic characteristics intersect with these cultures is important to fully grasp the experiences of veteran and military-connected students.

**Culture Defined**

The dynamic concept of culture has been defined by anthropologists, sociologists, psychologists, and philosophers (e.g., APA, 2002; Baldwin, Faulkner, Hecht, & Lindsley, 2006; Bernardi, 1977; Bolaffi, Bracalenti, Braham, & Gindro, 2003) though a unified definition is difficult to determine or find in scholarly references. Although the concept is fluid, the definition coined by Taylor (1920) still exists as a primary source and basis of understanding culture as a "complex whole which includes knowledge, belief, art, morals, law, custom, and other capabilities and habits acquired by man as a member of society" (p. 1). In their examination of culture, ethnicity, and race in American psychology, Betancount and Regeser Lopez (1993) used a definition of culture that focused on learning and sharing information (e.g., social norms, roles, values, beliefs) across generations. Riede (2011) explains that "culture may be understood as a materialist, population-level phenomenon that is generated through the actions of individuals and that takes archaeological shape through the consistent socially learnt repetition of such actions across generations" (p. 3). Consistent across these definitions is the passing of knowledge, norms, and beliefs across time and space.

Aligned with a multicultural perspective, defining culture broadly allows for more inclusivity about the dynamic relationship between affiliations and lived experiences (Pedersen, 1991). More specifically, Pedersen argues that previous definitions of multiculturalism have

focused primarily on multi-ethnic or multi-national approaches, but that culture goes beyond ethnic or national boundaries. Ethnicity is sometimes used interchangeably with culture, though ethnicity has mostly been defined "in terms of a common nationality," (Betancount & Regeser Lopez, 1993, p. 631). Whereas ethnicity and nationality are subsets of culture (Pedersen, 1991), I use a broader definition of culture to be inclusive of the different experiences that people from similar ethnicities or nationalities can have due to their other cultural group affiliations.

**Military Culture**

Daley (1999) argues that viewing the military as an *ethnicity* fits due to the associated traditions, norms, and values; however, I use the term *culture* because ethnicity denotes a shared familial lineage that may not be present for all military persons (Weber, 2012). Although, I do draw from Daley's work to illuminate the ways in which the military acts as a culture. Moreover, Snider (1999) uses the term *military culture* and highlights the ways that military can be viewed through the broader lens of culture.

Snider (1999) contends that the military culture contains four elements: discipline, ceremonial displays, professional ethos, and unit morale. The military demands that its members are disciplined and self-controlled and the military takes disciplinary actions quickly and swiftly when the rules are not adhered to (Daley, 1999; Soeters, Winslow, & Weibull, 2006). Snider explains that discipline is meant to impose order, to decrease confusion, and set up a strict pattern of action to be used in battle. He further contends that discipline is used to "ritualize the violence of war" (p. 15) and allow services members to disobey the societal rule of not killing.

Ceremonial displays refer to rituals and etiquette that make up the military culture (Snider, 1999). Ceremonial displays are indicative of the communal nature of the military and the rules and rituals that underlay family life, daily life, and work life (Daley, 1999; Soeters et

al., 2006) In particular, the uniform is part of the communal life of the military culture (Soeters et al., 2006). The uniform is also part of the control and self-discipline central in the military; the uniform must be pressed at all times and strict rules guide how each piece is to be worn when and where (Daley, 1999; Snider, 1999; Soeters et al., 2006). Other ritual displays are the salute, insignia of rank, wedding and funeral rituals (e.g., 21 gun salute).

Snider (1999) describes the military ethos as the values and professional ethics held within the military culture. The honor, duty, and hierarchy of the military govern the actions of all personnel (Raybeck, 2010). Military duties always take precedence and those duties should be met with eagerness and quality work (Daley, 1999). Hierarchy (e.g., a top down power structure) is an important characteristic of the military with rank dictating status (Daley, 1999; Raybeck, 2010; Soeters et al., 2006). Soeters et al. (2006) highlight that the power differential and coercive nature of the hierarchal relationships within the military is much larger than in the civilian society. Within the hierarchal structure, obedience to authority is essential (Daley, 1999; Raybeck, 2010; Soeters et al., 2006), leaving little to no room to question authority or push the boundaries of the system.

Moreover, each branch of the military has a core set of values that are taught to new recruits at the start of their service (Halvorson, 2010), all of which include the themes of duty and honor described by Raybeck (2010). Army values are *loyalty*, *duty*, *respect*, *selfless service*, *honor*, *integrity*, and *personal courage*. Air Force values include *integrity first*, *service before self*, and *excellence in all we do*. Navy and Marine Corps values are *honor*, *courage*, and *commitment*. Additionally, the Coast Guard values are *honor*, *respect*, and *devotion to duty*.

Snider (1999) contends that morale and cohesion are defining elements of the military culture. Snider notes that camaraderie and unit cohesion is imperative to operational

effectiveness. Furthermore, the underpinning of the military culture is that the military "take care of their own" (Daley, 1999, p. 294), meaning that when service people or their family members are in need of something the military or other service members will accommodate.

There are more nuanced aspects of military culture and experiences that are too large to enumerate in this study, such as the differences between military branches (i.e., Army, Air Force, Coast Guard, Marine Corps, Navy) and expeditions or campaigns (e.g., The Global War on Terrorism, Operations Enduring Freedom, Operations Iraq Freedom) and the initial transition of military members to civilian culture; however, one aspect of military identities that requires some consideration for the purpose of this study is masculinity. Hijonosa (2010) contends that the culture of the military is conducive to the construction of hegemonic masculine identities. Hegomonic masculinity is defined as the construction of masculine identities that are symbolically dominant over others and that receive the greatest privilege or benefit from systems of patriarchy (Connell & Messerschmidt, 2005; Hijonosa, 2010). Hegemonic masculinity not only places this identity over women, but also over subordinate (e.g., gay, immigrant) and marginalized masculinities (e.g., Black, working-class masculinities; Connell & Messerschmidt, 2005; Hijonosa, 2010) masculinities. Hijonosa (2010) found that military-connected men constructed hegemonic masculine identities that, "positioned themselves as more morally oriented, self-disciplined, physically able, emotionally controlled, martially skilled, or intelligent than civilians, members of other branches, different occupational specialties, and of different rank" (p. 179). Whereas the distinctions of these different domains (e.g., branch, specialty, rank) are too large to detail in this study, I offer this information about hegemonic masculinity as a way of understanding how some veteran and military-connected students may construct their identities not only within the culture of the military but also within the culture of higher

education. Specifically, Osborne (2013) found that veteran and military-connected students perceived that the military favored assertiveness, physical aggression, competitiveness, and withholding emotion. In particular, he noted the connection between these favorable traits and lack of help seeking. One woman veteran stated that, "Even as a student I feel this need to be independent, like don't whine about things, don't get emotional, just figure it out, get it done and move on" (Osborne, 2013, p. 252). The constructions of hegemonic masculinity could impact the experiences of veteran and military-connected students in several ways, including perceptions of help seeking, awareness of privilege, and emotional avoidance.

**Higher Education Culture**

Although the view of higher education as a culture has waxed and waned, there are still multiple elements that indicate a fit between the definition of culture and key characteristics of higher education (Bellamy, 2010). Kuh and Whitt (1988) make a compelling argument about how the concept of culture can help to understand the organization of the institution. They define the culture of higher education as:

> The collective, mutually shaping patterns of norms, values, practices, beliefs, and assumptions that guide the behavior of individuals and groups in an institute of higher education and provide a frame of reference within which to interpret the meaning of events and actions on and off campus (Kuh & Whitt, 1988, pp. 18-29).

Though there is danger in assuming sameness across all institutions or even within each subcultural within an institution, each institution could be thought of as a subculture of higher education with some generally agreed upon professional philosophies, ceremonies, and traditions in U.S. higher education.

The values of academia promote dialogue, inquiry, faculty and student engagement (Raybeck, 2010), autonomy, and academic freedom (Sporn, 1996). Also common, is a tendency

to question authority and push boundaries (Raybeck, 2010). There is also a general sense of community that facilitates intellectual and social growth and development (Kuh & Whitt, 1988).

In relation to the professional ethics within the institution, there is mixed consensus on who holds power in decision-making, making communication key in creating an inclusive dialogue. Shared governance is a term often used in higher education to mean that all participants (e.g., staff, faculty, student) have a shared role in the decision-making process (Olson, 2009). However, a long-standing belief is that faculty have the "governance" role, whereas, staff are the support system (Olson, 2009). This belief denotes a certain hierarchal relationship between staff and faculty, which, even if not overtly expressed, is felt system-wide. Olson argues that communication is a key factor in reaching a true partnership and in order to keep all participations included in the discussion. Therefore, there may be mixed feelings among students about how they get their needs met and the structure of hierarchy.

Regarding ceremonial displays and traditions, common to every college are graduations, inaugurations and presidential addresses, and ritual celebrations (Manning, 2000). During baccalaureate graduations students wear their caps and gowns and earn diplomas. Additionally, during commencements ceremonies, students wear their hoods and collars, signifying higher degrees (Manning, 2000). Inaugurations and presidential addresses are displays of community gathering to share information about the mission, vision, and plans for the college (Manning, 2000). Ritual celebrations may differ from campus to campus but in general many campuses hold student events such as homecoming, sports rallies, cultural events, and alumni gatherings.

**Cultural Comparison: Military and Higher Education Cultures**

Higher education exists as a subset of civilian culture, but has its own features that are distinctly different from civilian and military cultures. In this section, I highlight the differences

between military culture and civilian culture, broadly. I then discuss the differences and similarities between military culture and higher education culture, specifically.

The vast differences between military life and civilian life are apparent, though not widely researched; many of the comparisons between military and civilian life are anecdotal. Burton (2011), a previous marketing and communications coordinator for a military family resource center, explains some of the differences between military life and civilian life are job duties and time with family. She indicates that military service members are required to be on duty 24/7, whereas she is allowed to go home at the end of the day and not think about work (Burton, 2011). Moreover, she contends that service members do not get to spend as much time with their families and often miss out on developmental milestones (Burton, 2011).

The APA (2004) agrees that military life is different from civilian life in the following ways: (a) the military is required to be a cohesive unit and "exists as a specialized society" (p. 6); and (b) "military society is characterized by its own laws, rules, customs, and traditions, including restrictions on personal behavior, that would be acceptable in civilian society" (p. 6). Though they use the word society, I contend that they are also referring to culture because as Little (2014) explains, "a society describes a group of people who share a common territory and a culture (para. 4). These assertions (i.e., APA, 2004; Little, 2014) support the idea that the military exists as its own specific culture with norms that differ from civilian society. Therefore, I maintain that the use of terms such as society, norms, and structure, can be used in reference to the culture that exists within the military.

Acknowledging the descriptions of the cultural elements of the military and higher education, the differences and similarities between the two cultures begins to emerge. In regard to overarching differences, military culture is more structured and strict, whereas, higher

education culture is more free and transparent. Regarding similarities, hard work, having a mission, and ritual displays are common in both cultures.

With regard to structure, military and higher education cultures differ on their views of questioning authority, freedom of thought, communication, and structural design. Military culture is marked by obedience and honor to country (Hanafin, 2011; Raybeck, 2010); whereas, higher education culture often respects and encourages questioning and freedom of inquiry (Hanafin, 2011; Tierney, 1988). Veteran and military-connected students are *not* incapable of critical thinking; however, their military education may not prepare them for the conceptualizations that higher education demands (N. Osborne, personal communication, March 15, 2016). In terms of communication, the military has a strict hierarchy and obtains and releases information on a "need to know" basis (Daley, 1999; Raybeck, 2010; Soeters et al., 2006); whereas, higher education institutions often appreciate and encourage transparency, and can be ambiguous in their goals (Hanafin, 2011; Sporn, 1996). Moreover, the structural design of the military is quite clear and strong (Hanafin, 2011; Raybeck, 2010; Vacchi, 2012); whereas, higher education structures can be unclear and confusing (Raybeck. 2010). For example, there is a clear chain of command present in military culture (e.g., lieutenant, captain, major); whereas, is not always clear to students in higher education who they can go to for certain issues.

There are notable similarities that tend to go unnoticed but can support the acculturation of veteran and military-connected students to higher education culture. Markedly, the emphasis on working hard (e.g., training and academic rigor) and having a mission (Raybeck, 2010; Tierney, 1988). More specifically, military members make a large commitment to their service, which requires time, energy, and sacrifice. Similarly, taking on the commitment of pursing higher education takes a great deal of time, energy, and hard work to navigate the academic

requirements. In regard to ritual displays, both cultures share common traits as related to their "uniforms." Though, the cap, gown, robe, or hood are generally only worn during graduation ceremonies or other important events and the military uniform is part of the daily dress.

## Cultural Intersections with Gender, Race and Ethnicity, and Sexual Orientation

There is a long history of discrimination based on gender, race and ethnicity, and sexual orientation, such that civilian society and the military have created equal opportunity laws to ensure that underrepresented individuals would not be harassed or discriminated against based on these specific aspects of identity. However, sexism, racism, and homophobia/heterosexism still exist in U.S. society and create challenges for people with sociocultural minority identities. In this section, I briefly highlight issues that affect marginalized communities (i.e., women, racial and ethnic minorities, and sexual orientation minorities in the military and in higher education). Understanding how these different key demographic characteristics intersect within the distinct cultures of the military and higher education is important in order to fully understand the experiences of veteran and military-connected students.

***Trans-spectrum people.*** In addressing gender, I focus primarily on the experiences of non-transgender people and not on trans-spectrum people. In this section, I briefly highlight the difficulties for trans-spectrum people within the military and higher education; however, the challenges for this community are too large to enumerate in this study and warrant attention and specificity that is outside of the scope of this study.

*Trans-spectrum service members.* Trans-spectrum services members are currently banned from openly serving in the U.S. military. Despite the ban, it is estimated that there are over 15,000 trans-spectrum service members in the U.S. military (Gates & Herman, 2014) and those individuals face challenges based on their gender identity. The 2015 U.S. Transgender Survey

(USTS) indicated that 18% of transgender people had served in the military, and 15% of military respondents were veterans, which was twice the rate of the non-transgender U.S. population (James et al., 2016). The report further offered that 19% of the military respondents were discharged due to being transgender, 19% left the military to avoid being mistreated or harassed due to being transgender, 34% experienced homelessness at some point in their lives, and 33% had attempted suicide in their lifetime. In the documentary TransMilitary, Captain Jennifer Peace stated, "All of the challenges of being transgender have come from military policy. That's what's been the hardest" (Coughlin, Silverman, & Dawson, 2018).

*Trans-spectrum college students and higher education.* Trans-spectrum (e.g., transgender) students rate their emotional health below average at upwards of three times more than their non-transgender peers (Greathouse et al., 2018). James et al. (2016) reported that of the participants who responded to the 2015 USTS 46% said that they knew or thought they knew their classmates, staff, and faculty were aware of their transgender identity. Of those respondents, 24% reported they were verbally, physically, or sexually assaulted. Additionally, 16% of transgender students left school because of harassment due to their transgender status.

***Women***. Women are enrolled and persist at higher rates than men in higher education (NCES, 2014; Ross et al., 2012), though they appear to have less favorable outcomes post-graduation and are less represented in science, technology, mathematics and engineering (STEM). Women in the military are the minority and often experience stereotyping, discrimination, and harassment. Similar across both the military and higher education cultures is a high rate of sexual violence against women, which has long lasting psychological and possibly physical effects.

*Women service members and the military.* Women in the U.S. military have a long-standing history of struggling to serve in equal roles to their male counterparts. During the Civil War, women disguised themselves as men to serve in the military (Patterson, 2016). During World War II, most women were put in auxiliary units and served as nurses and clerical staff (Campbell, 1993; Patterson, 2016). In 1942, the Women's Auxiliary Army Corps were enlisted as the first experimental and secretive women's combat unit (Campbell, 1993). These women were put into a mixed combat unit and fared better than their male counterparts (Campbell, 1993). However, in 1943 the experiment was shut down (Campbell, 1993). In the 80's and early 90's there were few accounts of women in combat; however, in 1994 a law was passed specifically banning women from combat (i.e., "combat exclusion policy"; Patterson, 2016). It was not until 2013 that this ban was lifted (Peralta, 2013).

Women continue to be the minority gender in military and veteran populations and are underrepresented in higher command positions. According to the 2017 report on the profile of the military community, women make up 16.2% of active duty military and 19.6% of reservists (Department of Defense, 2017), which classify them as the minority gender in the military. Additionally, they comprise 9% of veterans (U.S. Department of Veterans Affairs, 2016). Moreover, women represent 17.7% of active duty and 19.4% reserve officers, but only 6.7% of active duty and 11.1% of reserves who are in the highest pay grade (Department of Defense, 2017).

In addition to job discrepancies, women experience unique challenges (e.g., stereotyping, discrimination) not faced by the majority of men. In a historically aggressive culture dominated by hegemonic masculinity (Hijonosa, 2010; Morris, 1996; Raybeck, 2010; Weitz, 2015), stereotypes about women's performance can lead to discriminatory and prejudicial reactions.

Previously held stereotypes about physicality have long kept women from serving in combat positions (Campbell, 1993). Boldry, Wood, and Kashy (2001) found that, when participants were asked to rate the ideal and the typical cadet, women with more feminine qualities were rated lower than their male peers on motivation and leadership. They concluded that gender stereotypes played a factor in cadets' perceptions of their women peers (Boldry et al., 2001). Weitz argues that the military promotes "masculinst" (p. 165) attitudes that reject any sign of weakness. Logan (2014), a woman veteran, echoed this sentiment, "many women…would rather take a bullet than show any sign of fragility among [their] male peers" (para. 4). Logan purports that women can try to combat those stereotypes in ways that have negative outcomes for themselves, including not seeking services that they may need.

These stereotypes and the male-dominated nature of the military may contribute to negative sexual experiences (i.e., sexual harassment, physical violence, sexual assault) of women in the military; however, both women and men report sexual harassment in the military. Fitzgerald, Magley, Drasgow, and Waldo (1999) found that 78% of women and 38% of men service members reported experiencing sexually harassing behaviors (e.g., sexist hostility, sexual hostility, unwanted sexual attention, sexual coercion). Likewise, Morral et al. (2015) found that 22% of women and 7% of men service members experienced sexual harassment in the past year; however, the authors did not define the specific behaviors involved. In addition, O'Brien, Keith, and Shoemaker (2015) noted that 1.3% of men and 24.3% of women evidenced military sexual trauma, which could include experiences such as sexual harassment and sexual violence (e.g., rape, assault). Specific to women, 21% of women reported having difficulty getting promotions or transfers after refusing superior officers' requests for sexual services (Murdoch & Nichol,

1995). Moreover, 16% of women reported being offered promotions in exchange for sexual services (Murdoch & Nichol, 1995).

In regard to sexual violence, researchers primarily focus on the experiences of women and report high rates of concern about and experience with sexual violence. Murdoch and Nichol (1995) found that 32% of women in the military reported being raped or experiencing an attempted rape by a coworker or supervisor. More recently Morral et al. (2015) found that 1% of men and nearly 5% of women service members reported sexual assault in the last year. Furthermore, 90% of those sexual assaults took place within a military setting (Morral et al., 2015). Sadler, Booth, Nielson, and Doebbeling (2000) found that of the 640 military women they surveyed, 48% reported sexual victimization during their service. Of those, 35% reported physical assault. A total of 30% of the women reported rape experiences (i.e., 11% attempted, 19% completed). Five percent of those women reported that more than one perpetrator completed the rape (Sadler et al., 2000). Sadler et al. (2000) found that women who experienced sexual violence during service had the poorest health outcome as compared to their peers who experienced no physical or sexual violence. Additionally, they found that women who had been raped during service had poorer educational achievements than their peers who had not been raped (Sadler et al., 2000).

*Women college students and higher education.* In higher education, notable areas of gender difference are access, representation, and post-college outcomes. In regard to access to college and degree completion, women and men fare relatively equally, with women averaging slightly higher. National statistics of higher education enrollment indicate that women are enrolled at a higher rate than men in all degree granting institutions and obtain more degrees than men at all levels (NCES, 2014; Ross et al., 2012). This persistence difference may be due to

socialization to be obedient and follow rules (Conger & Long, 2010; Owens, 2016), or because women tend to engage with faculty more often than men (e.g., Nora et al., 1996; Sax, Bryant, & Harper, 2005). However, Jacobs (1996) argued that women are still inadequately represented in top tier institutions due to two possible factors: (a) women tend not to in vast numbers at large engineering school, and (b) women tend to enroll in school part-time and, therefore, attend schools that accept part-time students. Whereas Jacob's review of the literature was completed over 20 years ago, currently women are still underrepresented in STEM fields and currently comprise only 24% of the STEM workforce (Beede et al., 2011; Camera, 2015). This lack of representation may be connected to the stereotype threat that women often experience, particularly in regard to mathematics (Beede, et al., 2011; Nguyen & Ryan, 2008). Beyond just the STEM fields, women appear to have less favorable job outcomes after college (Jacobs, 1996). Carey (2015) noted that females from top tier institutions earn approximately $10,000-$60,000 less than their male counterparts in the workforce, which is similar to the national female-to-male earning ratio of .80 (National Partnership for Women & Families, 2016).

Additional areas of difference across genders are students' academic and social experiences. Women and men appear to have similarities and differences in their needs and outcomes. According to Nora, Cabrera, Serra Hagedorn, and Pascarella (1996), women's interactions with faculty are significantly and positively related to their institutional persistence, whereas this area was not significantly related to men's persistence. In contrast, social interactions overall were significantly and positively related to persistence for *both* women and men (Nora et al., 1996).

A larger and arguably more dangerous area of difference is the higher rate of sexual harassment and sexual victimization for college women when compared to college men. Huerta,

Cortina, Pang, Torges, and Magley (2006) found that in a sample of 1455 women at one institution, 56.6% reported harassment in the last year with 92.4% having experienced gender harassment, 53% unwanted sexual attention, and 4.8% sexual coercion. Likewise, Yoon, Stiller Funk, and Kropf (2010) found that in a sample of 410 African American/Black and Anglo American/White women from two institutions, 33% and 22% reported limited occurrences (i.e., once or twice) and frequent occurrences of sexual harassment on campus. Moreover, they found that 97% of women suffered a behavioral experience of harassment. Specifically, 94% experienced sexual harassment, 92% experienced gender harassment, and 43% experienced sexual coercion (Yoon et al., 2010). Campus sexual violence statistics between 1995 and 2013 indicate that 33% of college women reported being raped, 25% reported attempted rape; 31% reported sexual assault, and 11% reported threat of sexual assault or rape (Sinozich & Langton, 2014). Huerta et al. (2006) found that women who experienced sexual harassment were more likely to experience psychological distress, which led to lower academic satisfaction, more illness, and more disordered eating.

***Racial and ethnic minorities.*** In this section, I briefly review the literature on race and ethnicity within military and higher education cultures. I offer points about racism and discrimination and how these areas particularly affect racial and ethnic minorities in these different cultures. Specifically, racial and ethnic minority students report significant experiences with discrimination on college campuses; whereas, little information suggests the same experiences with discrimination are reported for racial and ethnic minorities in the military. However, some disparities can be found regarding the representation and pay grades of racial and ethnic minority military service members.

*Racial and ethnic minority service members and the military.* Currently, the racial and ethnic makeup of the total military force (i.e., active duty, reserves) is similar to the racial and ethnic makeup of the U.S.; however, some races are overrepresented, which may be a function of larger sociocultural issues. In 2017, the military demographics were 70.7% White, 17% African American/Black, 4.4% Asian, 3.5% Other/Unknown, 2.5% Multi-racial, 1.0% American Indian or Alaskan Native, and 1.0% Native Hawaiian of Other Pacific Islander (Department of Defense, 2017). Hispanic as a race and ethnicity was not independently reported but instead reported as a function of the other race and ethnicity choices (i.e., 14% Hispanic or Latino, 86% non-Hispanic or Latino; Department of Defense, 2017). The U.S. demographic statistics for 2018 were 76.6% White, 13.4% African American/Black, 5.8% Asian, 1.3% American Indian or Alaskan Native, .2% Native Hawaiian or Other Pacific Islander, 2.7.% Multiracial, and 18.1% Hispanic or Latino (U.S. Census Bureau, 2018). Similarly, Hispanic ethnicity is reported concurrent with all races and ethnicities. Comparing the two demographics (i.e., military, U.S. census), African American/Black people appear to be overrepresented in the military as do Native Hawaiian or Other Pacific Islander, which may be a function of sociocultural issues of class and opportunity (Lutz, 2008).

Statistics also indicate a disparity in top tier position by race and ethnicity. In regard to officer positions for active duty service members, 23.3 % were minorities, and only 12.4% of those officers were in the highest pay grades (Department of Defense, 2017). Lower statistics were reported for Reserve personnel (i.e., 12.6% officers, 8.5% in highest pay grade; Departments of Defense, 2017). All races and ethnicities other than White were considered minority status.

I found little information about discrimination in the wider military culture; however, some anecdotal information suggests discrimination based on race and ethnicity is exhibited based on unit and is often not spoken about. Kemp-Blackmon (1999) conducted a study to determine if discrimination in the military was related to self-esteem for African American/Black military service members. She found no evidence to suggest this relationship; however, she conducted personal interviews with a few of the survey respondents and noted each appeared to respond cautiously and reported fear of repercussions for participating. Also notable, she found 33.3% of the military service members perceived that their unit did not treat people of all races equally. In addition, 34% reported that discrimination was common in their unit (Kemp-Blackmon, 1999). In addition, Tan (2015), a reporter for the Army Times, noted that an investigation was conducted into an Army unit that allowed racism without consequence on specified days (i.e., "racial Thursdays," para. 3). Tan also reported that a private from this same unit completed suicide in 2011, which authorities said was due to harassment connected with his Chinese heritage. This information suggests there may be some unspoken incidents of racism and discrimination that may be more unit-based than military wide.

*Racial and ethnic minority college students and higher education.* Racial and ethnic minority students experience significant levels of discrimination and racism, which negatively relates to their life satisfaction and likelihood to persist. In particular, racial and ethnic minority students perceive discrimination when they attend predominately White institutions (Allen & Solórzano, 2001; Nora & Cabrera, 1996; Peart-Forbes, 2004). Allen and Solórzano (2001) conducted focus groups with 36 participants and surveyed 210 more and learned of several racially-related incidents as reported by racial and ethnic minority students. Specifically, they found racial and ethnic minority students felt "racially invisible" (p. 252), or not important

enough to be included in the curriculum. In addition, these students experienced racial remarks in the classroom that were tolerated by faculty, and faculty maintaining low expectations of their performance. Moreover, they witnessed stereotyped information about people of color. Furthermore, they noted that often racial and ethnic minority students choose to stay silent in classes in order to avoid conflict or as a reaction to helplessness and isolation (Allen & Solórzano, 2001). The result of these covert and overt forms of racism were a decline in academic performance, an increase in psychological distress, and an overall sense of alienation and discouragement for racial and ethnic minority students (Allen & Solórzano, 2001).

In addition, Swim (2003) found that African American/Black students often perceived prejudicial actions such as staring, verbal expression of prejudice, bad service, and interpersonal offenses. Likewise, Smith, Allen, and Danley (2007) explained that "racial battle fatigue" (e.g., including frustration, anger, physical avoidance; p. 552) is a psychological stress response by African American/Black men to racial aggressions and microaggressions. They found that the major themes of microaggressions that African American/Black men perceived were: "(a) anti-Black male stereotypes and marginality and (b) hypersurveillance and control" (p. 561). An outcome of discrimination or negative racial campus climate is a potential decreased likelihood to persist (Fischer, 2007; Nora & Cabrera, 1996; Peart-Forbes, 2004).

Research also indicates that the experience of cultural congruity is significantly and positively related to both life satisfaction (Constantine & Watt, 2002) and the likelihood to persist (Gloria, Castellanos, Lopez, & Rosales, 2005; Gloria & Ho, 2003; Gloria, & Robinson Kurpius, 1996; Gloria & Robinson Kurpius, 2001) for racial and ethnic minority students. Constantine and Watt (2002) found a connection between cultural congruity and life satisfaction with African American women at both historically Black universities (HBUs) and predominately

White institutions (PWIs). They found a significant relationship with the type of institution, such that African American women at HBUs reported higher levels of cultural congruity and life satisfaction than African American women at PWIs. Therefore, cultural congruity within the university environment may be particularly important for racial and ethnic minorities students' life satisfaction. Moreover, Constantine, Robinson, Wilton, and Caldwell (2002) found that African American/Black and Latino men perceived less cultural congruity than their women peers and concluded that this difference could be connected to men perceiving more discrimination.

Moreover, two separate studies of national persistence trends over a six-year period, spanning 1995-2009, indicated that racial and ethnic minority students persist at lower rates than their Anglo American/White peers, with the exception of Asian American students. More specifically, Ross et al. (2012) reported that based on 2003-2004 entry rates, 51% African American/Black, 52% Hispanic or Latino/a American, 76% Asian American, 73% Anglo American/White, 66% Biracial/Multiracial students completed a degree by 2009. Further, in a study conducted with veteran students, Barnhart (2002) found that veteran students that identified as Asian [American] were mostly likely to persist and those who identified as African American were least likely to persist, which aligns with the national data trends.

***Queer-spectrum communities.*** The assumption of heterosexuality in U.S. culture creates difficulty and challenges for people who identify with a minority sexual orientation. Sexual orientation is defined as an "enduring pattern of emotional, romantic and/or sexual attractions" (American Psychosocial Association, n.d., para. 1). In both the military and higher education, individuals who identify with a minority sexual orientation (e.g., lesbian, gay, bisexual) have experienced challenges and discrimination. In the following sections, I shift between the use of

sexual orientation acronyms based on the sample of each study and the term used by the researchers.

*Queer-spectrum service members and the military.* Historically, attitudes toward LGB persons in the military were unfavorable (Estrada & Weiss, 1999), which created threatening and hostile consequences. In the past, if people who identified as LGB were revealed, they were immediately removed from service (Vacchi & Berger, 2014). Prior to 1993, when the DADT policy was enacted, people who identified as LGB were removed from service and received a "less than honorable" discharge (Miller & Cray, 2013, para. 13). Whereas the DADT policy was meant to be inclusive by allowing LGB military persons to continue to serve, it actually required service people to camouflage their sexual orientation identities in order to maintain their positions (Burks, 2011). The unintended consequence of this policy was covert discrimination that kept many people from enlisting or moving up in rank (APA, 2004; Burks, 2011). Moreover, the policy did not end the harassment or discharge of members whose sexual orientation was revealed. Estrada and Weiss (1999) described the account of one Navy sailor who was "court-martialed for homosexual conduct" (p. 84) and despite being acquitted of the charges, his life was threatened by a legal officer to ensure he did not reenlist for another six years.

Unfortunately, discrimination continues, likely related to the lingering effects of these previous policies. Miller and Cray (2013) explain that it is uncertain whether same-sex benefits will be issued by the Department of Veterans to families who live in states where same-sex marriages are not recognized. Moreover, they point out that some of the discharge paperwork of the services members who were dishonorably discharged due to their sexual orientation, lists their sexual orientation (Miller & Cray, 2013). This information can have deleterious consequences if passed onto to employers in one of the 28 states that do not have sexual

orientation as a protected identity in their anti-harassment and discrimination policies (ACLU, 2017; Miller & Cray, 2013).

Although, the DADT policy was repealed in 2010, service people may continue to face harassment and discrimination (Miller & Cray, 2013); however, strides are being made to protect queer-spectrum service members. Huge strides were made in 2015 when sexual orientation was added as a protected status to the military's Equal Opportunity policy. This policy ensures that harassment or discrimination complaints filed on the basis of sexual orientation have a clear path of documentation and oversight (Pellerin, 2015).

*Queer-spectrum college students and higher education.* Researchers have found that LGBT college students encounter more negative outcomes and hostile environments than their heterosexual peers (e.g., Brown, Clarke, Gortmaker, & Robinson-Keilig, 2004; Holley, Larson, Adelman, & Treviño, 2008; Rankin, 2006). In a campus climate review of 14 institutions, Rankin (2006) reported that 36% of LGBT undergraduate students experienced harassment, 20% felt that their physical safety was threatened, and 51% concealed their sexual identity. Additionally, in a review of 918 4-year institutions, over 60,000 queer-spectrum students were surveyed and reported they felt less safe, less welcome, less respect toward their sexual orientation, less valued, less belonging, and more isolation than their heterosexual peers (Greathouse et al., 2018). Moreover, Holley et al. (2008) found that the campus climate was more openly hostile toward LGB students than their racial and ethnic minority and heterosexual peers. Holley et al. (2008) studied undergraduates and compared their attitudes toward LGB people and people of five different ethnic racial groups (i.e., African American/Black, Asian American, First Nation, Latina/o, and Anglo American/White) and found that students held higher levels of negative attitudes and discomfort toward LGB people than they did toward any

other group. They also found that undergraduate students were more likely to voice their negative beliefs towards LGB people than toward members of racially underrepresented groups. Additionally, Brown et al. (2004) found that GLBT students on one Midwestern institution perceived their campus climate to be more anti-GLBT than did non-GLBT students, faculty members, student affairs staff, and resident assistants. They also found that administrators confronted students who made negative comments toward GLBT students more often than faculty (Brown et al., 2004), which could mean that the classroom environment did not feel safe for GLBT students if faculty were not as willing to intervene about discriminatory remarks.

Discriminatory or hostile experiences in higher education may impact queer-spectrum students' decisions to persist; however, national data on queer-spectrum students' persistence rates are not tracked (Windmeyer, 2016). Though national persistence trends are not available, Hughes (2018) conducted a study using national, longitudinal data across 78 institutions to ascertain whether LGB status affected persistence among a sample of 4162 STEM students. He found that LGB status decreased persistence in STEM fields by 8% over a four-year period.

## Theory of College Student Persistence and Gain/Loss Framework

In this section, I briefly review the theories that form the foundation for this study. I start with Tinto's (1975; 1993) theory of student departure and explain how this theory links to veteran and military-connected students' likelihood to persist. More specifically, I tie in the areas of Tinto's model that specifically fit with the relevant areas of study (i.e., perceived discrimination, cultural congruity, college-related gains) and offer research in these areas that strengthens the argument for using this theory. I then explain Servaty-Seib's (2014) gain/loss framework. I explain how this approach fits with Tinto's theory and offers a more in-depth conceptualization of the cognitive appraisal associated with life events. In addition, I offer areas

of research regarding veteran and military-connected students' experiences that align with the gain/loss framework.

**Tinto's Theory of Student Departure**

Tinto (1975; 1993) based his theory of college student departure on Durkheim's theory of suicide and Tinto's primary focus was on explaining the reasons why students disengage from institutions. Tinto (1975) viewed institutions of higher education as miniature societies with established rules and morals; his perspective is aligned with the argument in this study that higher education exists as its own unique culture. Building from the concept that institutions of higher education operate as societies, Tinto (1975) created a theory to explain the different layers of interacting forces that lead to students' decisions to depart. Conversely, this theory is also used to explain and study the factors associated with students' decisions to persist.

Tinto (1975; 1993) proposes a model (see Figure 1) that includes pre-entry attributes, academic and social systems, social integration, and goal commitments as vital parts in students' decisions to persist at an institution. Pre-entry attributes include students' backgrounds (e.g., social status, high school experiences), individual attributes (e.g., ability, race), and pre-college schooling (Tinto, 1975; 1993). The academic system pertains to grade performance and intellectual development, whereas, the social system pertains to peer-group and faculty interactions (Tinto, 1975; 1993). Social integration relates to the degree of congruence between individual characteristics and the social system (Tinto, 1975; 1993). Goal commitments are initially formed prior to entering the system and secondarily after interacting with the academic and social communities. Students make goal commitments at individual (e.g., type of major, graduating with honors) and institutional levels (e.g., committed to a family institution, desire to graduate from elite college; Tinto, 1993).

In this study, I focus on the following areas of Tinto's (1975) model of college student persistence: individual attributes, interactions within the social community, social integration, and secondary goal commitments. These four areas are directly related to the emphases on key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation), perceived discrimination, cultural congruity, and college-related gains (see Figure 2) in the present study. My first area of focus is on the individual attributes or key demographic characteristics that may moderate veteran and military-connected students' college experiences. As mentioned in the sections on gender, race and ethnicity, and sexual orientation, research has indicated that racial and ethnic minorities' experiences with discrimination in interactions with peers and faculty have contributed to increased feelings of a negative climate, which in many cases is negatively related to students' persistence decisions (Fischer, 2007; Nora & Cabrera, 1996; Peart-Forbes, 2004). Likewise, sexual orientation minority students' experiences with harassment and unsafe climates (Brown et al., 2004; Holley et al., 2008; & Rankin, 2006) likely lead to unfavorable views about cultural congruity and subsequent life satisfaction and likelihood to persist.

My second area of focus is on the interactions veteran and military-connected students have within the higher education social system (i.e., with faculty, staff, students). More specifically, I focus on the experiences of discrimination within the social system (see Figure 2). Some veteran and military-connected students report feeling uncomfortable or prejudiced against in classroom situations where their political beliefs and views (e.g., related to wartime events) were not shared by faculty and students (Ackerman et al., 2009). Such challenging experiences were related to subsequent disengagement and isolation on the part of veteran and military-connected students. In one situation, a veteran reported a faculty member referring to U.S. soldiers as "terrorists" (Ackerman et al., 2009, p. 11).

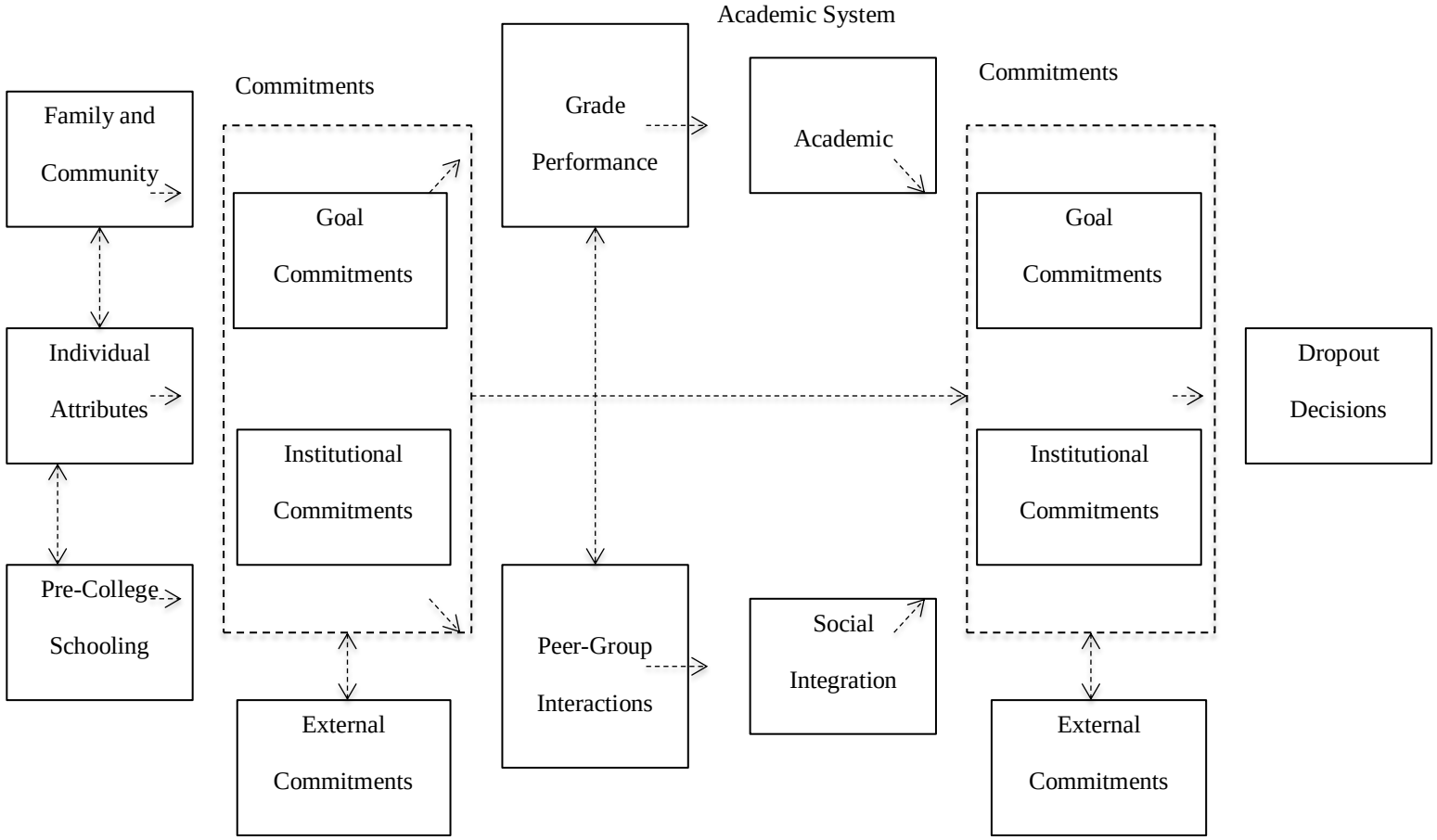


*Figure 1.*Tinto's Model of Student Departure. Reprinted from *Leaving College: Rethinking the Causes and Cures of Student Attrition* (p. 114), by V. Tinto, 1993, Chicago, IL: The University of Chicago Press. Copyright by The University of Chicago Press. Reprinted with permission.

Elliot, Gonzalez, and Larsen (2011) found several students responded about concerning remarks and appalling comments about war from their professors (e.g., calling troops "baby killers" and "torturers"). Often, veteran and military-connected students use the strategy of "blending in" (e.g., silence, neutrality; DiRamio et al., 2008, p. 88) as a tactic to fit into their environments, particularly in situations when inappropriate questions are asked of them when their veteran or military-connected status is revealed (e.g., *Have you killed anyone?*; Ackerman et al., 2009; DiRamio et al., 2008). Blending in can be deleterious to their academic enrichment because there is a component of disengagement in to this strategy (DiRamio et al., 2008; Livingston, Havice, Cawthon, & Fleming, 2011), which may result in not asking for help or even dropping classes.

My third area of focus is related to the social integration and belonging of veteran and military-connected students as it related to cultural congruity. Parallel to Tinto's conception of integration but a potentially more accurate term for marginalized students' experiences is the term belonging (Hurtado & Carter, 1997). Central to the theme of belonging is a balance of integrating into their new culture (e.g., higher education) while keeping a sense of cohesion with their other cultural identities (e.g., military culture, racial and ethnic cultures). Tinto (1975) claims that those students who sway from the social norms, perhaps as veteran and military-connected students may, might have a more difficult time establishing relationships with close others, which may affect their social integration. As veteran and military-connected students interact within their new culture they begin to assess the degree of congruence between their social systems (i.e., military culture and higher education culture; Tinto, 1975; 1993) and how much they belong. Veteran and military-connected students assess how these interactions and the values and mission of the institution as a whole fit within their personal cultural identities. Thus, their cultural congruity fits well within Tinto's (1975; 1993) concept of social integration.

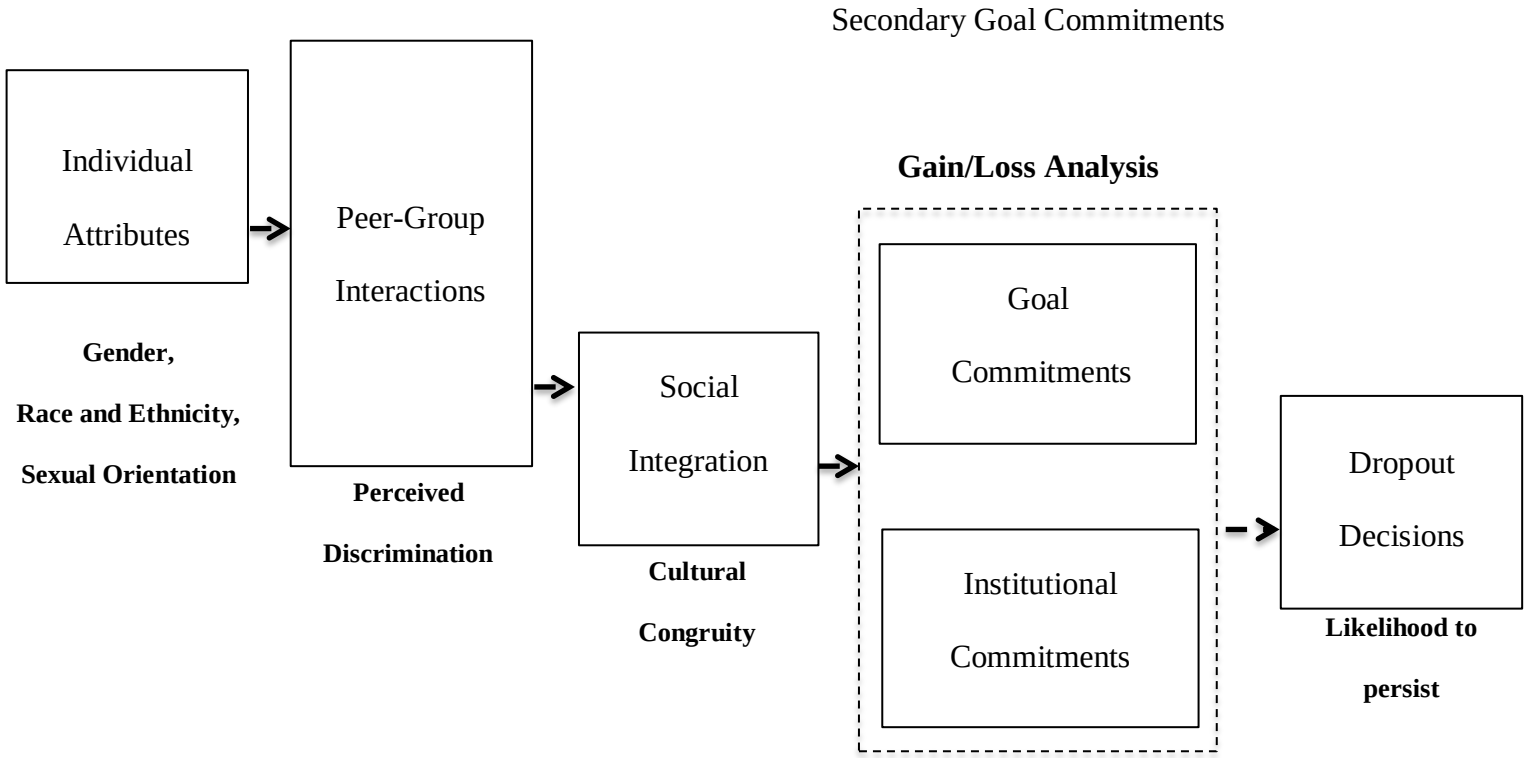


*Figure 2.* Model of variables of interest. Adapted from *Leaving College: Rethinking the Causes and Cures of Student Attrition* (p. 114), by V. Tinto, 1993, Chicago, IL: The University of Chicago Press. Copyright by The University of Chicago Press. Adapted with permission.

Veteran and military-connected students, transitioning from or still immersed in military culture, may have difficulty fitting into and navigating the new higher education culture (Ackerman et al., 2009; Raybeck, 2010), which could affect their persistence decisions. Military culture requires high levels of responsibility and is comprised of a rigidly structured environment, differing from the openness of higher education (Brown & Gross, 2011; Raybeck, 2010). Veteran and military-connected students report that the structure of the military is more clear and the chain of command is defined; whereas, they find higher education to be confusing to navigate and experience difficulty in figuring out who to go to for answers (Ackerman et al., 2009; Heath, 2010).

Research similar to this study has been conducted with veteran and military-connected students with regard to cultural congruity and fit within the higher education institutions; however, neither of the two studies I was able to find looked at the potential perceived discrimination or gains related to college as connected to either life satisfaction or the likelihood to persist. Weber (2012) found that veteran and military-connected students' cultural congruity was positively associated with their likelihood to persist. Likewise, Van Dusen (2011) conducted a study with 155 veteran and military-connected students across three institutions and found that the only variable that was significantly and positively related to the students' likelihood to persist was his environment variable. Interestingly, items on the scale he used to measure environment were focused on students' perceptions regarding treatment based on their veteran status (e.g., "I feel that the faculty respects my status as a veteran;" p. 85), which relates to their sense of belonging to the institution.

My fourth area of focus is the secondary goal commitments veteran and military-connected students make, which relate to weighing the gains and losses associated with being in

college. Secondary goal commitments include a cost/benefit analysis process in which students reevaluate their commitments to the institution and continued education (Tinto, 1975). Tinto posits that students will "tend to withdraw from college when [they] perceive that an alternative form of investment of time, energies, and resources will yield greater benefits, relative to costs, over time than will staying in college" (pp. 97-98). For example, if veteran and military-connected students evaluate that they may obtain more friendship connections outside of being a student they may decide to leave the campus. As students perceive more losses in relation to college they may tend to withdraw, whereas, perceiving more gains in relation to college could have a positive relationship to their likelihood to persist.

**Gain/Loss Framework**

The primary assumption and focus of the gain/loss framework is that people perceive gains and losses in relation to desirable and undesirable life events (Servaty-Seib, 2014). Servaty-Seib contends that the gain/loss framework captures the necessary complexities and dynamic nature of life events. The gain/loss framework assumes (a) life events result in gains and losses within various life domains, regardless of whether the life event is desired or not; (b) the perception of the gains and losses will affect the degree of impact; (c) individuals may perceive gains in one domain and losses in another domain in relation to the same life event; (d) changes in perceptions of gains and losses can occur; (e) perceived levels of gains will relate to positive outcomes (e.g., happiness) and perceived levels of loss will relate to negative outcomes (e.g., sadness; Servaty-Seib, 2014).

Underlying theoretical influences of the framework include approaches regarding loss, transitions, life-span development, and models of stress and coping (Servaty-Seib, 2014). In order to fully understand the concept of loss as it connects to the other theoretical influences,

Servaty-Seib used a systematic definition of loss as defined by Harvey (2001): "a reduction in resources, whether tangible or intangible, that involves a significant emotional investment in the resources by the person(s) experiencing the loss," (p. 840). Harvey and his colleagues (Harvey, 2001; Harvey & Miller, 1998; Harvey & Weber, 1998) contend a *psychology of loss* is needed to understand the unique contributions that loss has on individuals' and the reactions to stress in relation to loss. In particular, transitions in life contain changes and losses, which can contribute to stress reactions (Schlossberg, 1981). Schlossberg's theory of adults in transition asserts that people can grow or experience psychological decline from a transition. Schlossberg's theory aligns with a life-span developmental approach, which assumes that development is a life-long, multidirectional process that includes growth and decline and is impacted by multiples systems of influence (e.g., cultural changes, health, work; Baltes, 1987; Servaty-Seib, 2014). Congruent with these approaches, stress and coping theories presume that people's *perceptions* of life events create variable emotional and psychological outcomes, such that more positive evaluations will likely result in better psychological well-being (Servaty-Seib, 2014).

For veteran and military-connected students, the gain/loss framework can be used to conceptualize the numerous role changes (e.g., soldier to student) and cultural shifts they make between the military culture and the higher education culture. Additionally, people can perceive multiple gains and losses in relation to a single event (Goodman, Schlossberg, & Anderson, 2006; Harvey & Miller, 1998; Harvey & Weber, 1998) as would be the case for the transition to college or staying in college for veteran and military-connected students. The *perception* of the gains and loss is most important (Goodman et al., 2006; Harvey, 2001; Harvey & Miller, 1998), because this perception equates to the students' subjective experience, and when working with people in transition their perceptions will guide their outcomes.

The gain/loss framework offers a roadmap for understanding veteran and military-connected students' cognitive appraisals of their college experiences; this cognitive appraisal is linked with students' life satisfaction and their likelihood to persist. The limited research on veteran and military-connected students rarely uses the terms gains and losses in connection with their time in college; however, there are themes within the research that parallel such areas. Related to gains, veteran and military-connected students tend to have higher maturity levels than their civilian peers due to life experiences that have required extreme levels of leadership, responsibility, and calm under pressure (DiRamio et al., 2008; Rumann & Hamrick 2010; Vacchi, 2012), which may contribute to positive academic gains during their time as students. Many veteran and military-connected students also perceive combat as helping establish discipline, goals, and time management; skills, which they reported helped them as college students (Ackerman, et al. 2009; Rumann & Hamrick 2010). However, some veteran and military-connected students feel isolated from their peers due to their military experiences (Brown & Gross, 2011; DiRamio et al., 2008; Gonzalez & Elliot, 2013), which may indicate losses in areas of friendship and connection and, thus, may have an impact on their life satisfaction and likelihood to persist. Students reported difficulty finding people on campus who understand their military experiences (Ackerman et al., 2009). Moreover, Van Dusen (2011) explained that veteran and military-connected students are more likely to be retained when they perceive a veteran friendly community or possibly more gains in areas of belonging and friendship. Thus, supporting this area of potential loss could help veteran and military-connected students feel more connected on campus and might increase their life satisfaction and likelihood to persist.

## Purpose, Research Questions, and Hypotheses

Veteran and military-connected students are a sub-population of non-traditional students who have unique military cultural experiences, which contribute to challenges integrating into the culture of higher education. The most notable challenges for this population of students are navigating the new infrastructure and academic expectations, and socializing within their peer and academic communities. It is imperative that counseling psychologists understand the experiences of this unique population so they can better serve those who have served the U.S.

There is limited research pertaining to veteran and military-connected students' experiences in general and no research to date that simultaneously examines the variables of perceived discrimination, cultural congruity, and college-related gains as they relate to life satisfaction and likelihood to persist. The present study is also important in that the factors of discrimination and cultural congruity have emerged through qualitative investigations, but have yet to be quantitatively examined using a large and multi-institution sample of veterans and military-connected students. Moreover, examining the intersections of veteran and military-connected students' often marginalized identities (i.e., gender, race and ethnicity, sexual orientation) offer an even more in depth picture of how these students are experiencing higher education culture. The results from this study can inform student services professional, veteran students' offices, and college counselors about veteran and military-connected students' experiences and allow for the development of programming and interventions that best serve this student population and. My research questions and the associated hypotheses are below. Research Question #1 (RQ#1) is largely investigative, however, the hypotheses are supported by national data and empirical research, as reviewed in the Results section. Because experiences and challenges within the trans-spectrum community are larger than the scope of the present study, I

did not make specific hypotheses related to trans-spectrum service members or students. Therefore, any analyses in this study that include the trans-spectrum community are exploratory.

**RQ #1: Do perceived discrimination, cultural congruity, college- related gains, life satisfaction, and likelihood to persist in college vary by the key demographic characteristics of gender, race and ethnicity, and sexual orientation for veteran and military-connected students?**

H1a. Women will exhibit higher levels of discrimination than will men.

H1b. Women will exhibit a higher likelihood to persist in college than will men.

H1c. African American/Black and Hispanic or Latino/a American participants will exhibit a lower likelihood to persist than Asian American, Anglo American/White, and Biracial/Multiracial participants.

H1d. Racial and ethnic minority participants will exhibit higher levels of discrimination than Anglo American/White participants.

H1e. Queer-spectrum participants will exhibit higher levels of discrimination than heterosexual participants.

H1f. Queer-spectrum participants will exhibit a lower likelihood to persist than heterosexual participants.

**RQ #2: Are the factors of perceived discrimination, cultural congruity, and college-related gains associated with veteran and military-connected students' life satisfaction?**

H2a. Perceived discrimination will be negatively associated with life satisfaction.

H2b. Cultural congruity will be positively associated with life satisfaction.

H2c. College-related gains will be positively associated with life satisfaction.

**RQ #3: Are the factors of perceived discrimination, cultural congruity, and college-related gains associated with veteran and military-connected students' likelihood to persist in college?**

H3a. Perceived discrimination will be negatively associated with likelihood to persist.

H3b. Cultural congruity will be positively associated with likelihood to persist.

H3c. College-related gains will be positively associated with likelihood to persist.

**RQ #4: Do gender, race and ethnicity, or sexual orientation moderate the relationship between the independent variables (i.e., perceived discrimination, cultural congruity, college-related gains) and life satisfaction.**

H4a. Race and ethnicity will moderate the relationship between cultural congruity and life satisfaction, such that cultural congruity will have a stronger relationship with life satisfaction for racial and ethnic minority participants than for Anglo American/White participants.

**RQ #5: Do gender, race and ethnicity, or sexual orientation moderate the relationship between the independent variables (i.e., perceived discrimination, cultural congruity, college-related gains) and likelihood to persist.**

H5a. Gender will moderate the relationship between cultural congruity and likelihood to persist, such that that cultural congruity will have a stronger relationship with likelihood to persist for women than for men.

H5b. Race and ethnicity will moderate the relationship between perceived discrimination and the likelihood to persist, such that perceived discrimination

will have a stronger relationship with likelihood to persist for racial and ethnic minority participants than for Anglo American/White participants.

H5c. Race and ethnicity will moderate the relationship between cultural congruity and likelihood to persist, such that cultural congruity will have a stronger relationship with likelihood to persist for racial and ethnic minority participants than for Anglo American/White participants.

# CHAPTER III. METHOD

In this chapter, I describe the method I used for this study. I begin with a description of the participant sample. I include demographic characteristics, academic status and information, and military status information. I then outline the measures I used to assess the independent (i.e., perceived discrimination, cultural congruity, college-related gains) and dependent variables (i.e., life satisfaction, likelihood to persist). I conclude with the procedures I used to recruit participants and offer a description of the process individuals followed if they decided to participate.

## Participants

Demographic data related to individual identity characteristics provided an overview of the sample (see Table 1). A total of 184 veteran and military-connected students were the sample for this study. The age range of the sample was 19-61 ($M$ = 32.11, $SD$ = 8.50). In terms of gender, 136 (73.9%) reported man, 46 (25.0%) woman, one (0.5%) reported transgender, and one chose not to answer (0.5%). Gender, rather than sex, was used as gender expression has more salience in identity formation than assigned sex (West & Zimmerman, 1987). The sample included 135 (73.4%) Anglo American/White, 16 (8.7%) African American/Black, 10 (5.4%) Asian American, 10 (5.4%) Hispanic or Latino/a American, five (2.7%) American Indian or Alaskan Native, and five (2.7%) Biracial identified participants. Two people who identified as self-defined were recoded into Anglo American/White, based on their written responses (i.e., White, Slavic). The other three (1.6%) people who chose to self-define were recoded into an undefined category based on their responses of "American." In terms of sexual orientation, the sample participants identified as heterosexual ($n$ = 153, 83.3%), gay or lesbian ($n$ = 14, 7.6%),

bisexual (*n* = 14, 7.6%), questioning (*n* = 2, 1.0%), and self-defined (i.e., no definition; *n* = 1, 0.6%). In terms of relationship status, 92 (50.0%) participants identified as married, 51 (27.7%) single, 22 (12.0%) partnered, 11 (6.0%) divorced, three (1.6%) separated, three (1.6%) self-defined (e.g., engaged), and two (1.1%) widowed.

Table 1 *Summary of Individual Characteristics*

| Demographic Information | *n* | Frequency | *M* | *SD* |
|---|---|---|---|---|
| Age | 184 | | 32.11 | 8.50 |
| Gender | | | | |
| Man | 136 | 73.9% | | |
| Woman | 46 | 25.0% | | |
| Transgender | 1 | 0.5% | | |
| Self-defined (i.e., no definition) | 1 | 0.5% | | |
| Race and Ethnicity | | | | |
| African American/Black | 16 | 8.6% | | |
| American Indian or Alaskan Native | 5 | 2.7% | | |
| Anglo American/White | 135 | 73.4% | | |
| Asian American | 10 | 5.4% | | |
| Hispanic or Latino/a | 10 | 5.4% | | |
| Biracial | 5 | 2.7% | | |
| Self-defined (i.e., American) | 3 | 1.6% | | |
| Sexual Orientation | | | | |
| Bisexual | 14 | 7.6% | | |
| Gay or Lesbian | 14 | 7.6% | | |
| Heterosexual | 153 | 83.2% | | |
| Questioning | 2 | 1.0% | | |
| Self-defined | 1 | 0.6% | | |
| Relationship Status | | | | |
| Single | 51 | 27.7% | | |
| Married | 92 | 50.0% | | |
| Partnered | 22 | 12.0% | | |
| Separated | 3 | 1.6% | | |
| Divorced | 11 | 6.0% | | |
| Widowed | 2 | 1.1% | | |
| Other (e.g., engaged) | 3 | 1.6% | | |

Participants reported the institution that they currently attend and those were categorized by institutional characteristics (see Table 2). I categorized each institution based on military

friendliness and based on region with the information participants' gave about the name of their institution. In addition, participants responded about whether they attended a 2-year or 4-year institution. I used all of this information to check for differences among institution type.

Table 2 *Summary of Institutional Characteristics*

| Characteristic | *n* | Frequency |
|---|---|---|
| Military Friendliness | | |
| Friendly | 14 | 7.6% |
| Another campus location listed as friendly | 61 | 33.2% |
| Not listed | 95 | 51.6% |
| Not categorized | 14 | 7.6% |
| Region | | |
| West | 11 | 6.0% |
| Midwest | 123 | 66.8% |
| Southwest | 7 | 3.8% |
| Southeast | 14 | 7.6% |
| Northeast | 7 | 3.8% |
| Online | 9 | 4.9% |
| Not categorized | 13 | 7.1% |
| Institution type | | |
| 2-year | 72 | 39.1% |
| 4-year | 112 | 60.9% |

Participants were allowed to write in their response for the name of their institution and campus location. Because partial names or acronyms were used, it was difficult to identify all of the institutions and properly classify them. I did my due diligence in searching for the intuitions in order to properly categorize them. In terms of veteran friendliness, I used the Military Friendly Rating (Military Friendly, 2017) found online. In regard to these awards, participants were either from a an institution that was not listed on the site ($n$ = 95, 51.6%), a campus that was not listed as friendly but other campuses in their institution system were listed as friendly ($n$ = 61, 33.2%), or veteran friendly institution ($n$ = 14, 7.6%). I was unable to categorize 14 (7.6%) institutions by military friendliness. Moreover, I categorized participants' institutions by region using the National Geographic region map found at https://www.nationalgeographic.org/ maps/united-

states-regions/, and by online and international schools. Because online or on-campus education was not specifically mentioned in inclusion criteria, I decided to retain participants who reported online institution education. The sample consisted of institutions from the Midwest (*n* = 123, 66.8%), the Southeast (*n* = 14, 7.6%), the West (*n* = 11, 6.0%), online (*n* = 9, 4.9%), the Southwest (*n* = 7, 3.8%), and the Northeast (*n* = 7, 3.8%). I was not able to categorize 13 (7.1%) of the institutions by region. In regard to institution type, 112 (60.9%) were from 4-year institutions, and 72 (39.1%) of participants were from 2-year institutions.

Questions related to academic characteristics provided information on participants' academic identity and inclusion eligibility (see Table 3). Students reported their current enrollment status as either full-time status (*n* = 135, 73.4%) or part-time status (*n* = 49, 26.6%). In terms of registration status (i.e., year in school), the sample consisted of 65 (35.3%) master's level participants, 31 (16.8%) junior undergraduates, 30 (16.3%) sophomore undergraduates, 20 (10.9%) senior undergraduates, 17 (9.2%) first-year undergraduates, and 9 (4.9%) were doctoral level participants. There were 12 (6.5%) participants who did not respond regarding their current year in school.

To get a full picture of the participants' academic characteristics, several questions focused on their previous educational experiences. Participants responded with how many total institutions they attended (*M* = 2.66, *SD* = 1.60), the number of credits they completed (*M* = 94.38, *SD* = 146.37), and the number of semesters or trimesters they completed at higher education institutions. Participants were allowed to choose multiple responses to the number of semesters and trimesters; therefore, these numbers were recoded and grouped by the number of semesters (i.e., 2) and number of trimesters (i.e., 3) that would, theoretically, constitute a year of education. After this grouping process, the number of years of education reported by participants

were four or more years (*n* = 108, 58.7%), two years (*n* = 29, 15.8%), one year (*n* = 25, 13.6%), and three years (*n* = 21, 11.4%). There was one (0.5%) participant who did not respond.

Table 3 *Summary of Academic Characteristics*

| Demographic Information | *n* | Frequency | *M* | *SD* |
|---|---|---|---|---|
| Enrollment Status | | | | |
| Full-time | 135 | 73.4% | | |
| Part-time | 49 | 26.6% | | |
| Registration Status | | | | |
| First-year undergraduate | 17 | 9.2% | | |
| Sophomore undergraduate | 30 | 16.3% | | |
| Junior undergraduate | 31 | 16.8% | | |
| Senior undergraduate | 20 | 10.9% | | |
| Master's level | 65 | 35.3% | | |
| Doctoral level | 9 | 4.9% | | |
| Did not respond | 12 | 6.5% | | |
| Number of Institutions Attended | 184 | | 2.66 | 1.60 |
| Number of Higher Education Credits | 181 | | 94.38 | 146.37 |
| Number of years of Education completed | | | | |
| One year | 25 | 13.6% | | |
| Two years | 29 | 15.8% | | |
| Three years | 21 | 11.4% | | |
| Four or more years | 108 | 58.7% | | |
| Did not respond | 1 | 0.5% | | |

Questions regarding military characteristics provided information regarding eligibility for the study and offered factors that may contribute to differences in veteran and military-connected students' experiences (see Table 4). Participants were from the Army (*n* = 81; 44.0%), Air Force (*n* = 37; 20.1%), Marine Corps (*n* = 32; 17.4%), Navy (*n* = 25; 13.6%), or Coast Guard (*n* = 9; 4.9%). Additionally, participants' military status' were Veteran (*n* = 129; 70.1%), National Guard (*n* = 19; 10.3%), Full-time active duty (*n* = 19; 10.3%), and Reserves (*n* = 17; 9.2%). The range of length of service was 8-358 months (*M* = 92.07; *SD* = 70.55).

Mobilization and deployment are two ways in which military personnel are called to duty. Mobilization is most commonly the act of Reserve or National Guard members readying for active duty (Mobilization, 2016). Therefore, full-time active duty service personnel are

always in a state of readiness and their units can be deployed at any time; whereas, for Reserve or National Guard members, deployment is the next step after mobilization and entails serving a tour of duty (Deployment, 2016). With regard to mobilization, those who reported National Guard or Reserves status identified whether or not they had been mobilized in the last 12 months. The number of total participants who were mobilized is a combination of National Guard, Reserves, and full-time active duty participants ($n$ = 55; 29.9%). With regard to mobilization, 46 (25.0%) participants were not mobilized, and nine (4.9%) participants were mobilized in the previous 12 months. With regard to those 55 (29.9%) participants reported their deployment status in the previous 12 months, 49 (26.6%) were not deployed, and six (3.3%) participants were deployed.

I asked participants if they had ever been exposed to combat, how long ago was their combat exposure (if relevant), if they were injured due to their service, if they were receiving medical or disability benefits for service injuries (i.e., injury-related medical benefits), and if they were receiving medical benefits for mental health issues related to service (i.e., mental health-related medical benefits). In terms of combat exposure, 105 (57.1%) participants served in a combat zone and 79 (42.9%) had not served in a combat zone. Of those who reported combat exposure, the range of time between their most recent combat exposure and the study was 0-315 months ($M$ = 75.25; $SD$ = 55.62). With regard to injury, 97 (52.7%) reported no service injuries, and 87 (47.3%) reported service injuries. With regard to injury-related medical benefits, 101 (54.9%) participants reported they were not receiving injury-related medical benefits, and 83 (45.1%) participants reported they were receiving injury-related medical benefits. With regard to mental health-related medical benefits, 136 (73.9%) reported they were not receiving mental

health-related medical benefits due to their service, and 48 (26.1%) reported they were receiving mental health-related medical benefits due to their service.

Table 4 *Summary of Military Characteristics*

| Demographic Information | *n* | Frequency | *M* | *SD* |
|---|---|---|---|---|
| Branch of the military | | | | |
| Air Force | 37 | 20.1% | | |
| Army | 81 | 44.0% | | |
| Coast Guard | 9 | 4.9% | | |
| Navy | 32 | 17.4% | | |
| Marine Corps | 25 | 13.6% | | |
| Service Status | | | | |
| Veteran | 129 | 70.1% | | |
| National Guard | 19 | 10.3% | | |
| Reserves | 17 | 9.2% | | |
| Full-time active duty | 19 | 10.3% | | |
| Length of service in months | 181 | | 92.07 | 70.55 |
| Mobilized in previous 12 months | 9 | 4.9% | | |
| Not mobilized in previous 12 months | 46 | 25.0% | | |
| Deployed in previous 12 months | 6 | 3.3% | | |
| Not deployed in previous 12 months | 49 | 26.6% | | |
| Spent time in a combat zone | 105 | 57.1% | | |
| Did not spend time in a combat zone | 79 | 42.9% | | |
| Time since combat exposure in months | 105 | | 75.25 | 55.62 |
| Service injury | 87 | 47.3% | | |
| No service injury | 97 | 52.7% | | |
| Receiving injury-related medical benefits | 83 | 45.1% | | |
| Not receiving injury-related medical benefits | 101 | 54.9% | | |
| Receiving mental health-related medical benefits | 48 | 26.1% | | |
| Not receiving mental health-related medical benefits | 136 | 73.9% | | |

## Measures

In this section, I provide information on the measures I used to conduct this study. I describe the focus and aim of each measure, specify sample items, offer information about any subscales, and provide available psychometric properties of scale scores (e.g., internal

consistency, validity). In addition, I offer the Cronbach's alpha coefficient based on scores from the current sample. Information about the measures also appears in Table 5.

**Demographic Questionnaire**

Questions included in the demographic questionnaire (see Appendix A) were focused on institutional characteristic and participants' identity characteristics: individual, academic, and military. Questions about institutional characteristics included institution name and type (i.e. 2-year, 4-year). Questions about individual characteristics included age, gender, race and ethnicity, sexual orientation, and relationship status. Questions about academic characteristics included enrollment status, registration status, number of institutions they had attended, number of higher education credits they had completed, and number of semesters and trimesters they had completed. Questions regarding their military characteristics included the branch of the military in which they served/were serving, the description of their current service (i.e., Veteran, National Guard, Reserve, Full-time active), and length of service. Additional questions based on their service included, their mobilization and deployment status within last 12 months, a description of their combat exposure (i.e., if they had been in combat or not; time since recent combat exposure, if any), injury status related to service, and their health benefits related to service (i.e., receiving injury-related medical benefits, receiving mental health-related medical benefits). Moreover, participants were asked to answer questions to assess the degree to which

Table 5 *Summary of Variables and Measures*

| Variable | Measure | Source | Items | Cronbach's $\alpha$ | |
|---|---|---|---|---|---|
| | | | | Past range | Current |
| Perceived discrimination | Perceptions of Prejudice and Discrimination (PPD) | Cabrera & Nora (1994) | 8 | .82-.87 | .92 |
| Cultural congruity | Cultural Congruity Scale-Military (CSS-Military) | Weber (2012) adapted from Gloria & Robison Kurpius (1996) | 11 | .88 | .85 |
| College-related gains | College-Perceived Impact of Life Event Scale (PILES) | Miller & Servaty-Seib & (2016) | 39 | .91 | .96 |
| Career gains and losses | Perceived Impact of Life Event Scale (PILES) | Servaty-Seib (2014) | 7 | .91 | NA |
| Existential gains and losses | Perceived Impact of Life Event Scale (PILES)/ College PILES | Miller & Servaty-Seib & (2016) ; Servaty-Seib (2014) | 10-14 | .89/.96 | NA |
| Romantic gains and losses | Perceived Impact of Life Event Scale (PILES)/ College PILES | Miller & Servaty-Seib & (2016) ; Servaty-Seib (2014) | 5-6 | .85/92 | NA |
| Friendship gains | College-Perceived Impact of Life Event Scale (PILES) | Miller & Servaty-Seib & (2016) | 6 | .89 | NA |
| Life satisfaction | Satisfaction with Life Scale (SWLS) | Diener, Emmons, Larsen, & Griffin (1985) | 5 | .87-.93 | .89 |
| Likelihood to persist | Persistence/Voluntary Dropout Decision (PVDD) | Pascarella & Terenzini (1980) | 30 | .80-.89 | .89 |

they see the military as a core part of their identity. At the end of the survey, participants responded to an open-ended question to provide any further information or feedback. Specifically, students were ask, "What, if anything, would you like to share about your experiences as a veteran or military-connected student or this survey?" This question was not intended to provide information for qualitative examination, rather to provide insight and feedback into participants' experiences generally. However, I extrapolated general themes from this question for discussion and incorporated feedback into limitations and suggestions for future research.

On the recommendation of my dissertation committee, I decided to measure the extent to which participants identified with being a military service member as a core part of their identity in order to obtain additional demographic information related to military culture. A PSYCHINFO and Google Scholar search for scales related to military identity or cohesion did not yield a suitable measure. Therefore, I adapted the racial centrality (RC) subscale of the Multidimensional Inventory of Black Identity (MIBI; Sellers, Rowley, Chavous, Shelton, & Smith, 1997) to examine military centrality (see Appendix B). I adapted the scale by replacing the word "Black" with "service member." In keeping with the purpose of the original scale, the Military Centrality Scale (i.e., military centrality) specifically measured degree to which military identity is a "core part of an individual's self-concept" (Sellers et al., 1997, p. 806). Participants rated items on a scale from 1 (*disagree strongly*) to 7 (*agree strongly*). Sample items of the 8-item scale included, "I have a strong sense of belonging to service members" and "being a service member is an important reflection of who I am." Three of the eight items were reversed scored based on negative wording and items were added to obtain a total centrality score. In terms of psychometric information, the MIBI-RC subscale scores had an internal consistency of

α = .77 (Sellers et al., 1997). The Military Centrality Scale used in this study had an internal consistency of α = .84.

**Perceived Discrimination**

I used an adapted version the Perceptions of Prejudice and Discrimination (PPD; Cabrera & Nora, 1994) scale to measure participants' perceived discrimination based on their military cultural identity (see Appendix C). Cabrera and Nora (1994) proposed a three-factor model to assess perceived discrimination based on ethnicity. Cabrera and Nora (1994) created the PPD to assess students' perceptions of (a) discrimination based on the campus racial and ethnic climate, (b) prejudicial attitudes held by faculty and staff, and (c) in-class discrimination. They argue that these perceptions contribute to feelings of alienation. Participants rated items using a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items of the 8-item scale included, "I feel there is a general atmosphere of prejudice among students" and "I have been singled out in class and treated differently than other students." Higher scores on the PPD indicate more perceived discrimination.

Because the original scale was created to assess the level of perceived discrimination based on race and ethnicity, I adapted items mentioning these concepts (i.e., "minority", "racism," "race or ethnicity") to align with the veteran or military-connected identity (i.e., "military or veteran," "prejudice based on military or veteran status"). Items 1, 3, and 4 were adapted for this purpose. Cabrera and Nora (1994) initially proposed a three-factor structure for the scale, but due to low items on each factor and to retain as much statistical power as possible, I used the full score of the scale.

Regarding psychometric properties, the full measure has not been widely used in research, consequently, there is little reliability information to report; however, studies have used

items from the measure and have found strong reliability of scores (Cohen, Cohen, West, & Aiken, 2002). The internal consistency of the PPD in the original sample base ranged from .82-.87 (Cabrera & Nora, 1994). Cabrera, Nora, Terenzini, Pascarella, and Hagedorn (1999), used four items from the scale but only reported ranges of internal consistency for all the scales used in their study (i.e., α =.75-.86 for Anglo American/White students; α = .75-.82 for African American/Black students). Eimers and Pike (1997) did not report how many items they used from the PPD but found strong internal consistency (Cohen et al., 2002) with those items (θ = .83). Nora and Cabrera (1996) used seven of the eight items and found strong internal consistency (Cohen et al., 2002) with racial and ethnic minority and non-minority students (i.e., α = .85, .84, respectively). The Cronbach's alpha for the adapted PDD scores using the current sample was .92.

Construct and convergent validity is indicated by correlations between the PPD and alienation (Cabrera & Nora, 1994) and negative relationships with particular social and academic experiences (Nora & Cabrera, 1996). Construct validity was demonstrated through confirmatory factor analysis. Cabrera and Nora's (1994) initial three-factor structure was consistent for the racial and ethnic minority students but loaded differently for the Anglo American/White students; however, for each racial and ethnic group the "in class experiences" factor was significant and positively related to feelings of alienation (i.e., $r$ = .61, African American/Black; $r$ = .51, Hispanic American; $r$ = .44, Asian American; $r$ = .39 Anglo American/White). Nora and Cabrera (1996) found a negative and direct relationship between perceived discrimination and academic experiences with faculty and staff, social integration, and academic and intellectual development for racial and ethnic minority and non-minority students. In addition, they found a negative and indirect relationship between perceived discrimination and GPA and persistence for

both communities. Moreover, they found a negative relationship with direct and indirect effects between perceived discrimination and institutional commitments (i.e., direct effect for racial and ethnic non-minority students, indirect effect for racial and ethnic minority students).

**Cultural Congruity**

I used a version of the Cultural Congruity Scale (CCS; Gloria & Robinson Kurpius, 1996) that was adapted for veteran and military-connected students (CCS-Military; Weber, 2012; see Appendix D) to measure participants' level of congruence between military culture and higher education culture. Participants were meant to rate the 11 items on the CCS-Military scale from 1 (*not at all*) to 7 (*a great deal*); however, I made a scaling error when creating the online survey and participants were only given a 6-point scale with the same scaling headers. Sample items included, "I feel accepted at school as a veteran or service member" and "my military and school values often conflict." After reverse scoring the eight items related to incongruence, the scores are added to obtain a total congruence score. Higher scores indicated greater cultural congruence.

Gloria and Robinson Kurpius (1996) created the original CCS to measure Chicano/a students' perceptions of cultural fit between their ethnic cultural identity and the institution culture. The 13 items from the original scale were generated from the empirical and conceptual literature (Gloria & Robinson Kurpius, 1996). More specifically, Gloria and Robinson Kurpius (1996) based several of their questions off of a measure of perceived threat to racial identity that was created with racial and ethnic minority students at Ivy League campuses (Ethier & Deaux, 1990).

Weber (2012) adapted the items that related to family culture and ethnic values to reflect military culture and military values in order to create the CCS-Military. Weber deleted two items

(i.e., "I can talk to my family about friends from school," and "I can talk to my family about my struggles and concerns at school") because the original assumption of these items was the students shared the same ethnic background with their family members (Weber, 2012). Veteran and military-connected students may or may not share the same military background with their family members. Of note, this military adaptation was created under the supervision of one of the original authors of the CCS (i.e., Robinson Kurpius). I used the 11-item CCS-Military in the present study.

Regarding psychometric properties, reliability and validity for the CCS-Military was demonstrated. Weber (2012) calculated the internal consistency ($\alpha = .88$) of the CCS-Military and it displayed strong reliability (Cohen et al., 2002). The Cronbach's alpha for the CCS-Military scores using the current sample was .85. Convergent validity was demonstrated by positive relationships between cultural congruity and persistence (Weber, 2012). The CCS-military, together with PTSD symptoms, depression, anxiety, anger/aggression and social support accounted for 28.4% of the variance on military and veteran students' decisions to persist.

**College-Related Gains**

I used a combination of both the original and college versions of the Perceived Impact of Life Event Scale (PILES/College-PILES; Miller & Servaty-Seib, 2016; Servaty-Seib, 2014; see Appendix E) to assess the gains that participants attribute to being in college. The original PILES was developed using an adult sample with a broad age range, whereas the college student version was developed using a sample of traditional, first-year college students who were focused on their transition to college. Because veteran and military-connected students are non-traditional students, it was important for me to use the items from *both* versions of the PILES in order to

assess the possible uniqueness of the gains they attribute to being in college. The combined version of the PILES used in this study included the 39-items that were significant across both samples. Participants responded on a continuum from 1 (*extreme loss*) to 7 (*extreme gain*) for each item. Items include "control over the future" and "size of support network." Higher scores on the scale indicated more gains.

The original PILES (Servaty-Seib, 2014) is a 29-item measure, with three subscales (i.e., Existential, Career, Romantic) that was normed with an adult sample and was created to determine the perceived gains and losses in connection with a self-selected significant life event. Participants selected a broad range of life events including desirable (e.g., marriage) and undesirable (e.g., death) life events. Exploratory and confirmatory factor analyses with the initial 80 items, resulted in a three-factor structure wherein participants rated the gains they associated with their life event in three areas (i.e., Existential, Career, Romantic). Existential gains related to meaning and purpose in life and included items such as hope and definition/view of self. Career/ employment gains related to financial and education outcomes and included items such as current career and financial security. Romantic/sexual gains related to intimate relationships and sexual functioning and included items such as time spent with romantic partner and sexual pleasure.

Miller and Servaty-Seib (2016) developed the college version of the PILES using a college student sample and directed participants to consider their transition to college as their life event of focus. The College-PILES has 22 items and three subscales (i.e., Existential, Friendship, Romantic). Exploratory factor analysis with the initial 80 items, resulted in a three-factor structure wherein participants rated the gains they associated with their life event in three areas (i.e., Existential, Friendship, Romantic). Similar to the original PILES, existential gains related

purpose in life and personal values and included items such as expectations about the future and emotional maturity. Friendship gains related to quantity and quality of friendships and included items such as time spent with friends and ability to interact socially. Romantic/sexual gains also related to intimate relationships and sexual functioning and included items such as marital or relationship situation and sexual desire.

The primary difference between the two versions of the PILES is the different subscales: friendship for the college version and career/employment for the original version. These two subscales are developmentally appropriate for their respective samples in that college students are more likely to be focused on friendship than are older adults and adults are more likely to be focused on career and employment issues than are college students. Additionally, some of the items in the subscales were slightly different; however, also developmentally appropriate for the corresponding samples (see Miller & Servaty-Seib, 2016 for full description). For example, "purpose in life" was an item on the existential scale on the original version and "energy" was an item on the existential scale on the college version. These loadings make sense as adults may be seeking more purpose in life; whereas, college students are just beginning to seek out this meaning and are still developing their sense of self and finding their purpose. Conversely, college students may expending more energy than they did prior to entering college, due to increased independence and their expanded desire for focus on and control over their surroundings (Miller & Servaty-Seib, 2016).

For purposes of this study, I used the full-scale score of the combined version of the PILES rather than subscale scores. This decision was made in order to limit the number of variables of interest and retain as much statistical power as possible.

Regarding psychometric properties, reliability and validity have been demonstrated. Scores for each version of the PILES displayed reasonably strong internal consistency (Cohen et al., 2002). Miller and Servaty-Seib (2016) found a total scale Cronbach's alpha of $\alpha = .91$ for the college student version. Internal consistency scores were calculated on each of the subscales found in the original PILES (Servaty-Seib, 2014) and College-PILES (Miller & Servaty-Seib, 2016), respectively: Existential ($\alpha = .96, .89$); Career ($\alpha = .91$); Friendship ($\alpha = .89$) and Romantic ($\alpha = .92, .85$). The Cronbach's alphas for the total PILES scores using the current sample was .96. Convergent validity of the original PILES was demonstrated through positive associations with benefit finding (Existential $r = .55$, Career $r = .19$, Romantic $r = .25$; all $p < .01$), negative associations with impact of life events (Existential $r = -.52$, Career $r = -.32$, Romantic $r = -.36$; all $p < .01$), and no association with social desirability (Existential $r = .09$, Romantic $r = -.05$, Career $r = -.06$; all $p > .05$; Servaty-Seib, 2014). Convergent validity was further indicated through a negative relationship between losses on the College-PILES and first-year students' perceptions of belongingness in college (Miller & Servaty-Seib, 2016). The combined scale, used in this study, has not yet been tested; therefore, there is no previous reliability or validity to report.

**Life Satisfaction**

I used the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) to measure participants' life satisfaction. The SWLS is a 5-item measure (see Appendix F) that initially emerged as a factor of subjective well-being but was designed to assess happiness and overall life satisfaction (Diener et al., 1985). Sample items included, "If I could live my life over, I would change almost nothing" and "I am satisfied with my life." Participants rated each

item on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. I used the total score and higher scores indicated greater life satisfaction.

Regarding psychometric properties, reliability and validity have been demonstrated. Scores on the SWLS have strong reliability (Cohen et al., 2002) across studies. In regard to the creation of the scale, test-retest reliability was demonstrated in a sample of college students ($r$ = .82, $\alpha$ = .87; Diener et al., 1985). Constantine and Watt (2002) calculated the internal consistency at .93 using the measure with African American/Black women college students. More recently, Sheu, Mejia, Rigali-Oiler, and Primé (2016) calculated the internal consistency at .88 when used with a diverse sample of nearly 900 college students. The Cronbach's alpha for the SWLS scores using the current sample was .89. Convergent validity was demonstrated by the positive associations between the SWLS and happiness ($r$ = .58 to .59) and life ranking ($r$ = .62 - .68; Diener et al., 1985). Moreover, validity was demonstrated by a positive relationship between cultural congruity and life satisfaction for African American/Black women college students (Constatine & Watt, 2002) and a positive relationship between emotional stability and life satisfaction with Latino/a American and Anglo American/White students (Sheu et al., 2016).

**Likelihood to Persist**

I used the Persistence/Voluntary Dropout Decision (PVDD; Pascarella & Terenzini, 1980) measure to assess likelihood to persist. Participants rated the 30-items of the PVDD (see Appendix G) on a scale from 1 (*strong disagree*) to 5 (*strongly agree*). Sample items include "Most students at this university have values and attitudes different from mine" and "It is likely that I will register at this university next fall." Ten items were reverse scored so that higher scores on the PVDD indicated a higher likelihood to persist.

The PVDD was created to assess certain domains of Tinto's (1975) decision to persist model. More specifically, the 30-item scale has five subscales that address the different areas in Tinto's model that have a relationship with persistence. One of the subscales addresses interactions with peers: peer-group interactions (seven items; e.g., "It has been difficult for me to meet and make friends with other students"). Two of the subscales address relationships with faculty: interactions with faculty (five items; e.g., "I am satisfied with the opportunities to interact informally with faculty"); and faculty concern for students' development and teaching (five items; e.g., "Few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students"). The final two subscales address academics and goals: academic and intellectual development (seven items; e.g., "I am satisfied with my academic experiences at this university"); and institutional and goal commitments (six items; e.g., "I am confident that I made the right decision in choosing to attend this university"). For purposes of this study, I am using the full-scale score rather than subscale scores to limit the number of variables of interest and to retain as much statistical power as possible.

Regarding psychometric properties, reliability and validity have been demonstrated. Strong reliability has been found across studies (Cohen et al., 2002). Pascarella and Terenzini (1980) calculated internal consistency scores for each subscale ($\alpha$ =.71 to .84). Other researchers used full-scale scores and calculated internal consistency ($\alpha$ = .86, Peart-Forbes, 2004; $\alpha$ = .80, Walsh & Robinson Kurpius, 2015). The Cronbach's alpha for the PVDD scores using the current sample was .89. Predictive validity was demonstrated by the ability of the scale to correctly predict persisters and drop-outs (i.e., correctly predicted 78.5% and 78.9%, respectively; Pascarella & Terenzini, 1980). Convergent validity has been demonstrated through a positive

relationship between self-beliefs, residential status (Walsh & Robinson Kurpius, 2015), cultural congruity, and social support (Weber, 2012) and the likelihood to persist.

## Procedure

Prior to recruiting participants for the present study, I received exemption status from the Purdue University Institutional Review Board (IRB) for the use of human subjects. Additionally, I pursued dissemination approval from the 13 4-year institutions listed in Appendix H. The decision from the associated IRB office is listed in Appendix H. The request simply stated that I would send the recruitment email to the veteran support staff on campus in hopes that they would disseminate my study to veteran and military-connected students. The associated IRB offices required that no staff actively recruit members but rather simply send out the recruitment email

I collected the sample for this study using three recruitment methods. First, I networked with professional contacts at Purdue's Veterans Success Center and offices supporting veterans at the 13 4-year institutions listed in Appendix H, several of which are participants of the Big 10 Academic Alliance (n.d., formerly the Committee on Institutional Cooperation). Additionally, to attempt to get a balanced regional sample from both 4-year and 2-year institutions, I sent the survey to 258 community colleges (i.e., 2-year institutions) that were within geographical range of the 13 4-year institutions (see Appendix I). Only a handful of institutions confirmed that they sent the email (i.e., 3), and many of the institutions likely did not receive the email due to technological issues with firewall protections against spam emails. Those representatives who chose to disseminate the study, sent the recruitment email (see Appendix J) to veterans and military-connected students with whom they work. A link to the survey was included in the recruitment email.

Second, I used social media to reach a larger student population. More specifically, I reached out to student veteran organizations to post a message (see Appendix K) on their Facebook pages and organization websites. I also posted the message found in Appendix K to my personal Facebook page and asked that my friends share the message widely. Additionally, I posted the message on the Rally Point (https://www.rallypoint.com/), which is a career-networking site for veterans and military personnel.

Finally, due to an initial low response rate, I used Amazon Mechanical Turk (MTurk; https://www.mturk.com) as an additional recruitment tool. Amazon MTurk is a crowdsourcing application that allows task owners (e.g., researchers) access to a high volume of anonymous workers (e.g., survey participants) for compensation. Each participant receives a predetermined (i.e., by the researcher) amount of compensation upon completion of the survey and acceptance of the responses by the researcher. Certain participants are paid extra (i.e., a bonus) for their responses, which was the case for military service members ($0.10). I chose to compensate workers with $0.90, which, with the predetermined bonus, made the total compensation $1.00. Researchers can build survey tools within the Amazom MTurk system or provide a link to external survey system. I chose to post a link to use the Qualtrics system provided by Purdue University in order to enhance participants' confidentiality and privacy. I built certain rule-out parameters to ensure the participants met the criteria for this study. Specifically, participants were directed out of the study if they were not enrolled as a student.

A follow-up email (see Appendix L) was sent to all participating institutions to disseminate to veteran and military-connected students. This follow-up email helped to increase the response rate and remind potential participants of their opportunity to partake in the study.

Veteran and military-connected students who chose to participate followed the link provided in the recruitment email, web-posting, or Amazon MTurk task, to the online survey. On the initial page, they were presented with a research participant online consent form (see Appendix M) that included the inclusion criteria, the purpose of study, the steps taken to ensure confidentiality, any risks and benefits of the study, and the voluntary nature of the study. In order to meet the inclusion criteria for this study, participants needed to be enrolled at least half-time in a 2-year or 4-year, degree granting institution, be 18 years of age or older, and had to identify as a Veteran, or currently serving as a National Guard, Reserves, or active duty service member in a branch of the U.S. military (i.e., Air Force, Army, Coast Guard, Marine Corps, Navy). All participants were also notified of the chance to enter a drawing for one of four $25 Amazon gift cards. The odds of being awarded one of the gift cards was 4 in 253. At the end of the page, participants chose between one of two buttons to proceed: "I agree to participate in this study" or "I do not agree to participate in this study." Participants who chose to proceed with the survey were led through the demographic questionnaire and military centrality questions (see Appendices A- B) and the five quantitative measures (see Appendices C- G). Participants could choose to skip any item on the scales; however, a prompt gave them a choice to complete the item or continue on with the answer missing before moving to the next page. An exit button was presented at the end of each page to ensure participants could discontinue taking the survey at any point.

Upon completion of the survey, all participants were given the option to follow an additional link to enter into the drawing for one of four $25 Amazon gift cards (see Appendix N). Participants were asked to provide a current email address to be entered in the drawing. Their

email addresses were not linked to their survey responses, which increased confidentially and privacy of the participants.

Confidentiality was protected in multiple ways. First, the participants were not asked to provide identifying information beyond the name of their institution. The institution name was used only to classify the types of institutions that participants were attending and was not tied to individual responses. Second, all information was kept anonymous and data was stored on a secure online server, to which only me, my research advisor, and the Purdue IRB had access. Lastly, email addresses provided for use in the gift card drawing were not be connected to survey responses and will be discarded after winners have been notified.

# CHAPTER IV. RESULTS

In this chapter, I provide the results of the data analyses. First, I describe how I screened participants and cleaned the data. I then review the findings from the preliminary analyses. Next, I report the results of the primary analyses I used to address my research question and test the hypotheses. For all quantitative analyses, I used IMB SPSS Version 25 (SPSS 25, IBM Corp., 2017) to examine the data. Finally, I report the results of the open-ended question (i.e., focused on students feedback about the survey) at the end of the survey. Again, the present study did not employ a mixed methods approach. Rather, themes from that open-ended question arose that were important to report.

## Data Screening and Preliminary Analyses

To examine and screen my data, I used recommendations from Tabachnick and Fidell (2013). I first calculated the response rate based on known information. I then examined the data sets from both sampling methods to ensure genuineness of data and inclusion criteria. Next, I checked for missing data and calculated replacement values for any data that could be restored. I then examined the data to determine normality. Finally, I conducted the preliminary analyses to explore the possible relationships between demographic variables (i.e., excluding gender, race and ethnicity, sexual orientation) and the primary variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist).

Veteran and military-connected students were recruited in two ways, institutional emails and Amazon MTurk. Because of the nature of the recruitment and the potential for snowball sampling, it was difficult for me to determine how many veteran and military-connected students received the recruitment message and, therefore, not possible for me to calculate an overall

response rate. However, as reported by the Director of the Veteran Success Center at Purdue University, 344 Purdue University veteran and military-connected students received the recruitment email. Of those Purdue students, 48 responded to the study, which resulted in a 14% response rate. An additional six students responded from Purdue University; however, they indicated that they heard about the study from friends, social media, or other sources.

The initial combined data set (i.e., institutional emails and Amazon MTurk) included 253 participants. I first examined the Amazon MTurk data set for identical IP addresses. Due to the incentive to complete the study and receive payment, I set up the parameters to exclude those who did *not* endorse that they were currently enrolled in college. In a visual search of the data, there were a few cases that had identical IP addresses. In further reviewing the data, those with identical IP addresses had answered questions up to the point of the enrollment question then appear to have been directed out of the survey due to not being enrolled. Within minutes of the first response, participants from identical IP addresses returned to the survey and changed the answer to the enrollment question allowing them to continue in responding a second time to the study. Therefore, I made the decision to remove all 10 of the cases in question because I concluded that the responses were not genuine (resulting in $n = 243$). Because the same incentive for immediate payment was not present in the institutional recruitment process, I did not do the same visual search of IP addresses. Additionally, there was more chance of participants using the same IP addresses on college campuses due to shared computer spaces.

Next, I examined the data to ensure inclusion criteria (i.e., part time enrollment in either 2- or 4-year school, 18 years of age or older, veteran or current member of a branch of the U.S. military). I removed 41 cases that did not meet inclusion criteria (e.g., not enrolled, missing military status information; resulting in $n = 202$). I then removed one additional case due to a

lack of demographic information (resulting in $n$ = 201). I also removed two cases in which participants reported they attended international institutions, due to the focus on the experiences at U.S. institutions in this study (resulting in $n$ = 199). I then did a visual search of the data to look for missing values. I removed 14 participants who were missing a whole measure or more (resulting in $n$ = 185).

I then conducted a missing values analysis using SPSS to determine if there were any additional values missing from the data set. This analysis indicated three missing-at-random item values for college-related gains. I calculated these values using the linear trend at point option in SPSS in order to retain as much power as possible,

I then analyzed the data for univariate and multivariate outliers. I used boxplots to inspect for any extreme outliers. There were three outliers, one each, on the perceived discrimination, cultural congruity, and college-related gains; however, their values were not extreme. I then calculated the probability of multivariate outliers using the Mahalanobis Distance and chi square statistic. I found one multivariate outlier and removed that case (resulting in $n$ = 184).

In order to determine the assumptions of normality were met, I examined all five of the primary variables for skewness and kurtosis. I used the process of dividing the skewness or kurtosis statistic by its standard error statistic and the absolute value cut-off of 2.58 suggested by Field (2018) to assess these values. I found significant skewness for both perceived discrimination (skewness = 4.25, kurtosis = -1.40) and cultural congruity (skewness = -3.03, kurtosis = .03). I used the logarithmic transformation to reach normality for the perceived discrimination measure. Yet, in the correction, it created kurtosis on the measure (skewness = 1.57, kurtosis = -3.96). I used the reflect and square root transformation to normalize the cultural congruity measure (skewness = -.94, kurtosis = -1.28). The correlation matrices for the original

versus the transformed variables did not differ in strength or significance, therefore I decided to use the original, non-transformed variables (Davino, Furno, & Vistocco, 2013; Osborne, 2002). Furthermore, Tabachnick and Fidell (2013) explain that skewness and kurtosis do not make a meaningful difference in large samples (i.e., around 200) and that visual representations of the sample can be more useful. Because my sample was moderately large, I examined the normality q-plots and detrended plots and only found minor shifts in the data. Therefore, I concluded that the assumptions of normality were met.

Next I examined, the data for linearity, homoscedasticity, and multicollinearity. To address linearity and homoscedasticity I used a series of regressions and plotted the residual values against the predicted values in a scatterplot (Field, 2018). There was no curvature or funneling of the plot points, therefore, the assumptions of linearity and homoscedasticity were met. To address multicollinearity, I performed correlations among all five of the primary variables and looked for correlations that were .90 or higher (see Table 6; Tabachnick & Fidell, 2013). None of the significant correlations were above .60, which indicated there was no multicollinearity among the primary variables.

In order to assess for possible associations between my primary variables and the continuous background variables, I performed bivariate correlations using all five primary variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist) and the seven continuous background variables (i.e., age, socioeconomic status, number of total credits, number of institutions attended, number of total months in service, number of months since seen combat, military centrality). I only considered controlling for those variables (i.e., covariates) that were significant at or below .01 and had a medium or greater effect size (i.e., $r \geq .30$; Cohen, 1988; Table 6). Given these parameters, I

decided to control for socioeconomic status (SES) due to its effect size and significant positive correlations with college-related gains ($r = .29$, $p < .001$), life satisfaction ($r = .42$, $p < .001$), and likelihood to persist ($r = .24$, $p = .001$). More specifically, I included SES as a covariate for RQ1. In addition, I controlled for SES in the hierarchical multiple regression analyses addressing life satisfaction (i.e., RQ2, RQ4).

Table 6 *Summary of Bivariate Correlations of all Primary Variables and Continuous Demographic Variables*

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Perceived Discrimination | | | | | | | | | | | |
| 2. Cultural Congruity | -.59*** | | | | | | | | | | |
| 3. College-related Gains | -.09 | .31*** | | | | | | | | | |
| 4. Life Satisfaction | -.22** | .35*** | .48*** | | | | | | | | |
| 5. Likelihood to Persist | -.28** | .40*** | .51*** | .41*** | | | | | | | |
| 6. Age | -.06 | .16* | .11 | .08 | .09 | | | | | | |
| 7. SES | -.09 | .17* | .29*** | .42*** | .24** | .15* | | | | | |
| 8. Number of Total Credits | -.07 | .05 | .08 | .16* | .11 | .13 | .16* | | | | |
| 9. Number of Institutions | .02 | .06 | -.06 | -.00 | -.02 | .37*** | -.11 | .09 | | | |
| 10. Number of Months in Service | -.13 | .15* | -.03 | .09 | .06 | .69*** | .14 | .14 | .31*** | | |
| 11. Number of Months Since Combat | -.01 | .11 | .14 | .14 | .16 | .45*** | .01 | .06 | .33** | .42*** | |
| 12. Military Centrality | .02 | -.03 | .06 | .15* | .13 | .09 | .01 | -.04 | -.05 | .19** | .07 |

*$p$ = <.05; **$p$ = <.01; *** $p$ = <.001. Note: these correlations refer to full sample ($N$ = 186), with exception of the correlations with number of credits ($n$ = 183), months in service ($n$ = 183) and the correlation between number of credits and months in service ($n$ = 181).

In addition, I ran descriptive statistics (i.e., means, medians, modes, standard deviations, minimum, and maximum scores) for all primary variables (see Table 7). The data indicated that this sample of students perceived little discrimination in relation to their military identity.

Table 7 *Descriptive Data for Primary Variables*

| Variable | *M* | *SD* | Median | Mode | Minimum | Maximum |
|---|---|---|---|---|---|---|
| Perceived Discrimination | 15.57 | 8.00 | 13.50 | 8.00 | 8.00 | 40.00 |
| Cultural Congruity | 46.16 | 11.16 | 47.00 | 56.00 | 12.00 | 65.00 |
| College-Related Gains | 175.64 | 32.70 | 173.50 | 153.00 | 67.00 | 265.00 |
| Life Satisfaction | 23.26 | 6.99 | 24.00 | 30.00 | 5.00 | 35.00 |
| Likelihood to Persist | 105.11 | 16.44 | 104.00 | 104.00 | 59.00 | 147.00 |

I then performed a series of MANOVAs to determine if the primary variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist) differed based on the categorical background variables. The 16 categorical background variables were relationship status, time in college as desirable or undesirable (i.e., the last question of the PILES, college-related gains measure, see Appendix E), institution region, military friendliness of institution, 2-year/4-year institution type, enrollment status, current year in school, number of years attended higher education based on semesters or trimesters completed (i.e., total years in school), military branch, military service status, mobilization status within last 12 months (i.e., mobilization), deployment status within last 12 months (i.e., deployment), whether or not they have spent time in a combat zone (i.e., combat), whether or not they had been injured due to service, (i.e. injury), whether or not they were receiving medical benefits related to their service (i.e., injury-related medical benefits; mental health-related medical benefits). I did not address gender, race and ethnicity, and sexual orientation in this section, as

these background variables were part of my research questions and primary analyses. See Appendix O for more information about significant group differences that emerged among the variable but were not considered covariates in primary analyses.

I used both statistical and empirical guidelines to determine any necessary actions based on these preliminary MANOVAs. I used the same statistical parameters to examine the categorical variables (i.e., < .01 significance and medium effect size) as I did with the bivariate correlations; however, I used the partial eta-squared output in SPSS as the effect size and the corresponding cutoff values for this statistic (i.e., .02 = small, .13 = medium, .26 = large; Pierce, Block, & Aguinis, 2004). Based on these analyses, I decided to control for perceived time in college as desirable or undesirable in the MANCOVA for RQ1, $F(5, 178) = 16.53$, $p < .001$, Wilk's $\lambda = .68$, $\eta^2 = .32$. At the univariate level, differences emerged based on perceived discrimination ($F(1, 182) = 4.46$, $p = .04$, $\eta^2 = .02$), cultural congruity ($F(1, 182) = 48.40$, $p < .001$, $\eta^2 = .21$), college-related gains ($F(1, 182) = 36.31$, $p < .001$, $\eta^2 = .17$), life satisfaction ($F(1, 182) = 8.59$, $p = .004$, $\eta^2 = .05$), and the likelihood to persist ($F(1, 182) = 28.92$, $p < .001$, $\eta^2 = .14$). Specifically, participants who saw their time in college as a desirable experience scored lower on perceived discrimination, and higher on cultural congruity, college-related gains, life satisfaction, and the likelihood to persist than participants who saw their experience as undesirable (see Table 8). Moreover, the statistical differences that emerged on likelihood to persist met the criteria for inclusion as a covariate in the multiple regressions for RQ3 and RQ5.

Furthermore, I decided to control for mental health-related medical benefits, $F(5, 178) = 5.71$, $p < .001$, Wilk's $\lambda = .86$, $\eta^2 = .14$, in the MANCOVA for RQ1. At the univariate level, differences emerged based on perceived discrimination ($F(1, 182) = 25.50$, $p < .001$, $\eta^2 = .12$), cultural congruity ($F(1, 182) = 15.87$, $p < .001$, $\eta^2 = .08$), and likelihood to persist ($F(1, 182) =$

5.97, $p = .015$, $\eta^2 = .03$). Specifically, participants who endorsed that they were receiving mental health-related medical benefits due to their service scored higher on perceived discrimination and lower on cultural congruity and the likelihood to persist than those who did not endorse that they were receiving mental health-related medical benefits due to their service (see Table 9).

Table 8

*Perception of College Experience as Desirable or Undesirable and Primary Variables*

| | Desirable $n = 165$ | | Undesirable $n = 21$ | | | | |
|---|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *F* | *p* | $\eta^2$ |
| Perceived Discrimination | 15.12 | 7.79 | 19.00 | 8.96 | 4.46 | .04 | .02 |
| Cultural Congruity | 47.99 | 9.73 | 31.95 | 11.51 | 48.40 | .00 | .21 |
| College-Related Gains | 180.41 | 30.27 | 138.59 | 27.05 | 36.31 | .00 | .17 |
| Life Satisfaction | 23.75 | 6.94 | 19.10 | 6.02 | 8.59 | .00 | .05 |
| Likelihood to Persist | 107.29 | 15.65 | 88.19 | 12.30 | 28.92 | .00 | .14 |

Table 9 *Receiving Mental Health-Related Medical Benefits due to Military Service and Primary Variables*

| | Receiving mental health-related medical benefits $n = 49$ | | Not receiving mental health-related medical benefits $n = 137$ | | | | |
|---|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *F* | *p* | $\eta^2$ |
| Perceived Discrimination | 20.27 | 9.20 | 13.90 | 6.82 | 26.50 | .00 | .12 |
| Cultural Congruity | 40.85 | 10.52 | 48.03 | 10.80 | 15.87 | .00 | .08 |
| College-Related Gains | 168.46 | 34.99 | 178.17 | 31.59 | 3.17 | .08 | .02 |
| Life Satisfaction | 21.71 | 6.93 | 23.73 | 6.96 | 2.81 | .10 | .02 |
| Likelihood to Persist | 100.19 | 17.12 | 106.85 | 15.90 | 5.97 | .02 | .03 |

## Primary Analyses

After screening the data and completing preliminary analyses, I performed the main analyses. More specifically, I used Multivariate Analysis of Covariance (MANCOVA) to address the first research question and two hierarchal multiple regressions to address the subsequent four research questions. In this section, I describe in more detail the analyses I used to answer my research questions and to test the associated hypotheses.

### Group Differences Based on Gender, Race and Ethnicity, and Sexual Orientation

My first research question was focused on determining whether the primary study variables differed based on the key demographic characteristics of gender, race and ethnicity, and sexual orientation. I developed my hypotheses connected to this research question based on previous national data trends and empirical evidence. I did not make specific hypotheses related to trans-spectrum service members or students because the experiences of this community are too large to enumerate in this study. Therefore, any analyses that include the trans-spectrum community are exploratory. My first hypothesis was that women would exhibit higher levels of discrimination than would men (H1a; e.g., Fitzgerald et al., 1999). Additionally, I hypothesized that women would exhibit greater likelihood to persist than men (H1b; NCES, 2014; Ross et al., 2012). Further, I hypothesized African American/Black and Hispanic or Latino/a American participants would exhibit a lower likelihood to persist than Asian American, Anglo American/White, and Biracial/Multiracial participants based on recent patterns of higher education persistence (H1c; Ross et al., 2012; see page 36). Additionally, I hypothesized that racial and ethnic minority participants would exhibit higher levels of discrimination than Anglo American/White participants (H1d; Allen & Solórzano, 2001; Nora & Cabrera, 1996; Peart-Forbes, 2004). Moreover, I hypothesized that queer-spectrum participants would exhibit higher

levels of discrimination than heterosexual participants (H1e; Brown et al., 2004; Greathouse et al., 2018; Holley et al., 2008; & Rankin, 2006). Finally, I hypothesized that queer-spectrum participants would exhibit lower likelihood to persist than heterosexual participants (H1f; e.g., Greathouse et al., 2018; Hughes, 2018).

I performed one three-way MANCOVA to address research question one and to test the four associated hypotheses. MANCOVA is the appropriate analysis to use to address research question one because it allows for analysis with multiple groups (i.e., gender, race and ethnicity, sexual orientation), multiple dependent variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist), and inclusion of covariates (Tabachnick & Fidell, 2013).

With regard to my independent variables, gender was composed of four categories (i.e., man, woman, transgender, chose not to answer). Race and ethnicity was composed of seven categories based on participant responses (i.e., African American/Black, American Indian or Alaskan Native, Anglo American/White, Asian American, Hispanic or Latino/a American, Biracial/Multiracial, self-defined). Sexual orientation was composed of four options (i.e., bisexual, gay or lesbian, heterosexual, non-binary). In the latter case, I collapsed members who responded with questioning or self-defined for sexual orientation into a non-binary category. I used three covariates (i.e., SES, time in college as desirable or undesirable, mental health-related medical benefits) in the MANCOVA based on my preliminary analyses (see pp. 76-81).

I decided to first perform a MANCOVA, as I intended and was agreed upon in the proposal meeting, with all three key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) and all five of the primary study variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist). The findings

indicated that there were significant differences on gender (observed power .97), $F(15, 411.73) = 2.25$, $p = .005$, Wilk's $\lambda = .80$, $\eta^2 = .07$, race and ethnicity (observed power of .99), $F(30, 598) = 1.89$, $p = .003$, Wilk's $\lambda = .70$, $\eta^2 = .07$, and sexual orientation (observed power of .89), $F(15, 411.73) = 1.73$, $p = .044$, Wilk's $\lambda = .85$, $\eta^2 = .06$. Additionally, there were significant differences based on the interaction between gender and sexual orientation (observed power of .89), $F(10, 298) = 2.08$, $p = .026$, Wilk's $\lambda = .87$, $\eta^2 = .07$, and based on the three-way interaction between gender, race and ethnicity, and sexual orientation (observed power of .86), $F(5, 149) = 3.02$, $p = .013$, Wilk's $\lambda = .91$, $\eta^2 = .09$.

At the univariate level, there were significant differences on perceived discrimination based on race and ethnicity, $F(6, 144.64) = 2.73$, $p = .015$, $\eta^2 = .10$, the two-way interaction between sexual orientation and gender, $F(2, 202.04) = 3.81$, $p = .024$, $\eta^2 = .05$, and the three-way interaction between gender, race and ethnicity, and sexual orientation, $F(1, 371.95) = 7.02$, $p = .009$, $\eta^2 = .04$. There were also significant differences on cultural congruence based on race and ethnicity, $F(6, 302.65) = 3.51$, $p = .003$, $\eta^2 = .12$, and the three-way interaction between gender, race and ethnicity, and sexual orientation, $F(1, 845.99) = 9.80$, $p = .002$, $\eta^2 = .06$. Additionally, there were significant differences on college-related gains based on gender, $F(3, 3374.16) = 4.30$, $p = .006$, $\eta^2 = .08$. Finally, there were significant differences on the likelihood to persist based on sexual orientation, $F(3, 620.69) = 3.11$, $p = .028$, $\eta^2 = .06$.

The low cell sizes (e.g., 1 for transgender, 3 for non-binary sexual orientation, 1 for interaction between gay or lesbian, African American/Black woman) inhibited me from running broad based post-hoc analyses to test for differences between groups. However, in terms of main effects, men scored higher on college-related gains ($M = 177.42$, $SD = 29.71$) than women ($M = 168.30$, $SD = 38.18$). In addition, the one transgender participant scored the highest on college-

related gains (*M* = 265.00) and the one participant who chose not to answer the gender question scored the lowest on college-related gains (*M* = 157). With regard to race and ethnicity, American Indian or Alaskan Native participants (*M* = 38.00, *SD* = 9.25) scored lower on cultural congruity than African American/Black (*M* = 49.63, *SD* = 12.5), Anglo American/White (*M* = 46.49, *SD* = 10.87), Asian American (*M* = 46.90, *SD* = 8.39), Hispanic or Latino/a American (*M* = 40.90, *SD* = 13.32), or Biracial/Multiracial participants (*M* = 49.00, *SD* = 12.90). However, the three participants who self-defined as American scored the lowest (*M* = 36.67, *SD* = 10.26). Moreover, American Indian or Alaskan Native participants (*M* = 25.80, *SD* = 5.26) scored higher on perceived discrimination based on military identity than African American/Black (*M* = 12.31, *SD* = 6.88), Anglo American/White (*M* = 15.10, *SD* = 7.58), Asian American (*M* = 17.70, *SD* = 10.79), Hispanic or Latino/a American (*M* = 18.60, *SD* = 9.92), Biracial/Multiracial participants (*M* = 17.20, *SD* = 6.26), and the self-defined participants (*M* = 16.67, *SD* = 10.26). Furthermore, heterosexual participants (*M* = 106.75, *SD* = 15.53) scored higher on the likelihood to persist than bisexual (*M* = 93.71, *SD* = 18.78), gay or lesbian (*M* = 101.36, *SD* = 19.58), or non-binary participants (*M* = 92.33, *SD* = 12.86). In the future, I would need larger samples sizes in order to delve more deeply into these possible group differences and potential moderating effects of these key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation).

Due to the challenges related to low cell sizes, I decided to perform the MANCOVA again and excluded any categories that had fewer than five participants (i.e., transgender, chose not to answer gender, self-defined race and ethnicity, non-binary sexual orientation). For the MANCOVA, I again used the covariates of SES, time in college as desirable or undesirable, and receiving mental health-related medical benefits. The findings indicated that there were significant differences based on race and ethnicity (observed power of .95), $F(25, 547.58) = 1.84$,

$p$ = .008, Wilk's λ= .74, $\eta^2$ = .06, and sexual orientation (observed power of .87), $F$(10, 294) = 1.98, $p$ = .036, Wilk's λ= .88, $\eta^2$ = .06. Additionally, there were significant differences based on the two-way interaction between gender and sexual orientation (observed power of .89), $F$(10, 294) = 2.05, $p$ = .028, Wilk's λ= .87, $\eta^2$ = .07, and based on the three-way interaction between gender, race and ethnicity, and sexual orientation (observed power of .85), $F$(5, 147) = 3.00, $p$ = .013, Wilk's λ= .91, $\eta^2$ = .09.

At the univariate level, there were significant differences on perceived discrimination based on race and ethnicity, $F$(5, 159.33) = 3.01, $p$ = .013, $\eta^2$ = .09, the two-way interaction between sexual orientation and gender $F$(2, 201.62) = 3.81, $p$ = .024, $\eta^2$ = .05, and the three-way interaction between gender, race and ethnicity, and sexual orientation, $F$(1, 366.88) = 6.93, $p$ = .009, $\eta^2$ = .04. There were also significant differences on cultural congruence based on race and ethnicity, $F$(5, 298.73) = 3.47, $p$ = .005, $\eta^2$ = .10, and the three-way interaction between gender, race and ethnicity, and sexual orientation, $F$(1, 859.41) =9.97, $p$ = .002, $\eta^2$ = .06. Finally, there were significant differences on the likelihood to persist based on sexual orientation, $F$(3, 620.69) = 3.11, $p$ = .028, $\eta^2$ = .06.

The low cell sizes and use of covariates inhibited me from running broad based post-hoc analyses. However, in terms of mains effects, American Indian or Alaskan Native participants ($M$ = 38.00, $SD$ = 9.25) scored lower on cultural congruity than African American/Black ($M$ = 51.87, $SD$ = 9.01), Anglo American/White ($M$ = 46.29, $SD$ = 10.81), Asian American ($M$ = 47.78, $SD$ = 8.39), Hispanic or Latino/a American ($M$ = 40.90, $SD$ = 13.98), or Biracial/Multiracial participants ($M$ = 51.00, $SD$ = 10.93). Moreover, American Indian or Alaskan Native participants ($M$ = 25.80, $SD$ = 5.26) scored higher on perceived discrimination based on military identity than African American/Black ($M$ = 12.27, $SD$ = 7.12), Anglo

American/White (*M* = 15.18, *SD* = 7.61), Asian American (*M* = 17.33, *SD* = 11.38), Hispanic or Latino/a American (*M* = 18.60, *SD* = 9.92), or Biracial/Multiracial participants (*M* = 15.56, *SD* = 8.06). Furthermore, heterosexual participants (*M* = 107.72, *SD* = 17.17) scored higher on the likelihood to persist than bisexual (*M* = 93.71, *SD* = 18.78), or gay or lesbian participants (*M* = 104.62, *SD* = 15.95). In the future, I would need larger samples sizes in order to delve more deeply into these possible group differences and potential moderating effects of these key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation).

The low cell sizes created complications in identifying differences among the groups to address hypotheses in RQ1. Due the underrepresentation of racial and ethnic minority participants and queer-spectrum participants, and at the recommendation of my committee, I did not proceed with analyzing the differences between participants based on race and ethnicity and sexual orientation. In order to proceed, I would have had to group participants into dichotomized categories, for example, Anglo American/White participants and racial and ethnic minority participants, which may contaminate the findings and misrepresent the experiences of participants (Sun, 2010). Therefore, H1c-H1f were not addressed.

However, there was adequate representation of both men and women, as based on the analyses from the second MANCOVA, to address H1a and H1b. In fact, based on the demographics of the military (see p. 29), women were overrepresented in this study (i.e., 25% in this study; 16-19% in military). Therefore, I did address H1a and H1b. In the analyses to address H1a and H1b, I sought to determine if there were any differences based on gender (i.e., man, woman). No significant differences emerged based on gender, $F(5, 147) = .42$, $p = .832$, Wilk's $\lambda = .99$, $\eta^2 = .01$. More specifically, hypotheses H1a and H1b were not supported, as no significant difference emerged between men and women based on perceived discrimination or the likelihood

to persist. In the initial MANCOVA, the only difference that emerged based on gender was with college-related gains. It may be that this significance did not emerge here due to the exclusion of the two participants (i.e., transgender, chose not to answer). These two participants scored the highest and lowest on college-related gains, which likely contributed to the difference on college-related gains that emerged based on gender in the initial MANCOVA.

In summary, of the six hypotheses in RQ1 only two were addressed because of insufficient representation among the key demographic variables (i.e., race and ethnicity, sexual orientation). Of the two hypotheses that were addressed (i.e., H1a, H1b) neither was supported. Specifically, no differences emerged on perceived discrimination or likelihood to persist based on gender.

### Life Satisfaction and Likelihood to Persist as Related to Perceived Discrimination, Cultural Congruity and College-Related Gains for Veteran and Military-Connected Students

In order to address RQ2 and RQ3 and to test the associated hypotheses, I performed two separate hierarchal multiple regression analyses, one for each of the primary DVs of life satisfaction (i.e., RQ2) and likelihood to persist (i.e., RQ3). Based on the recommendations of the committee, I did not address RQ4 or RQ5 because of the low representation of racial and ethnic minority participants and queer-spectrum participants. The first step of each regression was similar in that I included the background variables that were significantly associated with each DV. However, the specific variables included differed based on the preliminary analyses. Specifically, for life satisfaction, I included SES and for likelihood to persist I included college as a desirable or undesirable experience. The second step of each regression were identical. More specifically, in the second step, I added perceived discrimination, cultural congruity, and college-related gains.

Hierarchal multiple regression was a better fit for addressing RQ2 and RQ3 than other options, such as path analysis. Tinto (1975) suggested that path analysis is the best analysis to use when studying college student persistence; however, he argued this choice in the context of discussing research done using longitudinal designs. In the current study, I did not use a longitudinal design; so hierarchal regression is a reasonable alternative option. Additionally, the choice of hierarchal multiple regression is strengthened by Tinto's (1975) claim that he did not intend for his pictorial model (see p. 43) to be interpreted as a literal statistical path model. In addition, path analysis is best used when enough prior evidence indicates a logical path model (Cohen et al., 2002). Because there is not much prior research focused on veteran and military-connected students or research that addresses the relationships among the current IVs (e.g., perceived discrimination, cultural congruity, college-related gains) and the main DVs (i.e., life satisfaction, likelihood to persist), hierarchal regression was a better choice than path analysis.

***Life satisfaction.*** RQ2 was focused on whether perceptions of discrimination, cultural congruity, and college-related gains were related to participants' life satisfaction. Based on the research regarding perceived discrimination and life satisfaction (e.g., Stronge et al., 2015; Verkuyten, 2008), I hypothesized that perceptions of discrimination would be negatively associated with life satisfaction (H2a). Conversely, I hypothesized that cultural congruity and college-related gains would be positively associated with life satisfaction (H2b and H2c, respectively).

With regard to life satisfaction, R was significantly different from zero at the end of step 2, R = .60 $F(4, 179) = 24.87$, $p < .001$. After step 1, $R^2 = .18$ (Adjusted $R^2 = .17$), $F(1, 182) = 39.44$, $p < .001$. In particular, SES was positively associated with life satisfaction ($\beta = .42$, $sr^2 = .42$, $p < .001$; see Table 10), and explained 17% of the model. After step 2 (i.e., RQ2), with the

inclusion of the primary study variables and key demographic characteristics, (i.e., perceived discrimination, cultural congruity, college-related gains, gender, race and ethnicity, sexual orientation), $R^2 = .36$ (Adjusted $R^2 = .34$), $\Delta R^2 = .18$, $F(3, 179) = 16.62$, $p < .001$, and the model explained 34% of the variance on life satisfaction. In particular, college-related gains explained 17% of the variance and was positively associated with life satisfaction ($\beta = .34$, $sr^2 = .31$, $p < .001$), which indicated support for hypothesis H2c. None of the other variables significantly contributed to life satisfaction. In sum, the data supported hypotheses H2c, but not hypotheses H2a or H2b. Hypotheses H4a-c were not tested due to low representation of racial and ethnic minority and queer-spectrum participants. See Table 12 for full hypotheses testing outcome.

Table 10 *Predictors of Life Satisfaction*

| Variable | *B* | *SE B* | *β* | $\eta^2$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| SES | .15 | .02 | .42* | .42 |
| **Step 2** | | | | |
| SES | .10 | .02 | .29* | .28 |
| Perceived Discrimination | -.07 | .07 | -.07 | -.06 |
| Cultural Congruity | .09 | .05 | .15 | .11 |
| College-Related Gains | .07 | .01 | .34* | .31 |

*$p$ <.001

***Likelihood to persist.*** RQ3 was focused on whether perceptions of discrimination, cultural congruity, and college-related gains were related to participants' likelihood to persist. Based on research regarding discrimination and persistence (e.g., Nora & Cabrera, 1996; Peart-Forbes, 2004) and consistent with Tinto's (1975) theory, I hypothesized that perceived discrimination would be negatively associated with the likelihood to persist (H3a) and that

cultural congruity and college-related gains would be positively associated with the likelihood to persist (H3b and H3c).

With regard to the likelihood to persist, R was significantly different from zero at the end of step 2, R = .59, $F(4, 179) = 23.42$, $p < .001$. After step 1, $R^2 = .14$ (Adjusted $R^2 = .13$), $F(1, 182) = 28.92$, $p < .001$. In particular, college as desirable or undesirable was negatively associated with the likelihood to persist ($\beta = -.37$, $sr^2 = -.37$, $p < .001$; see Table 11) and explained 13% of the model. Specifically, participants who found their experience to be desirable were more likely to persist. After step 2 (i.e., RQ3), with the inclusion of the primary study variables and key demographic characteristics, (i.e., perceived discrimination, cultural congruity, college-related gains, gender, race and ethnicity, sexual orientation), $R^2 = .34$ (Adjusted $R^2 = .33$), $\Delta R^2 = .21$, $F(3, 179) = 18.77$, $p < .001$, and the model explained 33% of the variance on the likelihood to persist. In particular, college-related gains were positively associated ($\beta = .40$, $sr^2 = .36$, $p < .001$), with the likelihood to persist and explained 21% of the variance, which indicated support for hypotheses H3c. In sum, the data supported hypotheses H3c, but not hypotheses H3a or H3b. Hypotheses H5a-c were not tested due to low representation of racial and ethnic minority and queer-spectrum participants. See Table 12 for full hypotheses testing outcomes.

Table 11 *Predictors of Likelihood to Persist*

| Variable | *B* | *SE B* | *B* | $\eta^2$ |
|---|---|---|---|---|
| **Step 1** | | | | |
| College as Desirable or Undesirable | -19.10 | 3.55 | -.37* | -.37 |
| **Step 2** | | | | |
| College as Desirable or Undesirable | -6.34 | 3.73 | -.12 | -.10 |
| Perceived Discrimination | -0.30 | 0.16 | -.15 | -.12 |
| Cultural Congruity | 0.19 | 0.13 | .13 | .09 |
| College-Related Gains | 0.20 | 0.03 | .40* | .36 |

*$p < .001$

Table 12 *Summary of Hypotheses Testing*

| Hypothesis # | Hypothesis | Outcome |
|---|---|---|
| H1a | Women will exhibit higher levels of discrimination than will men. | Not supported |
| H1b | Women will exhibit a higher likelihood to persist in college than will men. | |
| H1b | African American/Black and Hispanic or Latino/a American participants will exhibit a lower likelihood to persist than Asian American, Anglo American/White, and Biracial/Multiracial participants. | Not tested |
| H1c | Racial and ethnic minority participants will exhibit higher levels of perceived discrimination than Anglo American/White participants. | Not tested |
| H1d | Queer-spectrum participants will exhibit higher levels of discrimination than heterosexual participants. | Not tested |
| H1e | Queer-spectrum participants will exhibit a lower likelihood to persist than heterosexual participants. | |
| H2a | Perceived discrimination will be negatively associated with life satisfaction. | Not supported |
| H2b | Cultural congruity will be positively associated with life satisfaction. | Not supported |
| H2c | College-related gains will be positively associated with life satisfaction. | Supported |

Table 12 continued

| | | |
|---|---|---|
| H3a | Perceived discrimination will be negatively associated with likelihood to persist. | Not supported |
| H3b | Cultural congruity will be positively associated with likelihood to persist. | Not supported |
| H3c | College-related gains will be positively associated with likelihood to persist. | Supported |
| H4a | Race and ethnicity will moderate the relationship between cultural congruity and life satisfaction, such that cultural congruity will have a stronger relationship with life satisfaction for racial and ethnic minority participants than for Anglo American/White participants. | Not tested |
| H5a | Gender will moderate the relationship between cultural congruity and likelihood to persist, such that that cultural congruity will have a stronger relationship with likelihood to persist for women than for men. | Not tested |
| H5b | Race and ethnicity will moderate the relationship between perceived discrimination and the likelihood to persist, such that perceived discrimination will have a stronger relationship with likelihood to persist for racial and ethnic minority participants than for Anglo American/White participants. | Not tested |
| H5c | Race and ethnicity will moderate the relationship between cultural congruity and likelihood to persist, such that cultural congruity will have a stronger relationship with likelihood to persist for racial and ethnic minority participants than for Anglo American/White participants. | Not tested |

## Non-Hypothesized Findings from Open-Ended Responses

In this section, I report the themes that arose from the open-ended question at the end of the survey. Specifically, participants responded to the following question: "What, if anything, would you like to share about your experiences as a veteran or military-connected student or this survey?" This question was not intended to add qualitative analysis to this study, as I did not use a mixed methods approach. However, there were some general themes in the responses that were noteworthy. To extrapolate these themes, I read through each of the responses and coded the content into different areas. The themes highlighted were the most frequently mentioned content areas. I reference these results as appropriate in the discussion section.

### Social Connections and Lack of Understanding

A theme that arose in the examination of open-ended responses was participants' desire for social connections and a perception of lack of understanding about military service by non-military people. Participants noted that social connections were difficult with non-military peers, particularly when peers could not fully understand the lives participants lived in the military. One participant simply stated, "I miss my friends." Another participant elaborated more and identified the lack of understanding by non-military peers,

> The hardest part is the social isolation…Fellow students, faculty, and staff members have strong opinions about service members and veterans, but have narrow actual experiences of service members and veterans. When they ask me questions about my service I get the sense that they are just trying to confirm or deny their schema about what veterans are like, instead of any sincere interest in getting to [*sic*] me.

### Lifestyle Differences

Another theme that arose in the examination of open-ended responses was the differences in lifestyle between veteran and military-connected students and their non-military peers. In

particular, participants noted perceptions of entitlement and lack of maturity amongst their non-military peers. One participant noted, “The disconnection comes from maturity levels and live [*sic*] views…The professionalism between veterans and students is miles wide in terms of how we work/get things accomplished. Working with them is rather hard as most are lazy/incompetent.” Another participant stated, “Kids today have no core values. Everything is about " THEM," and others [*sic*] opinions don't matter. That is not what I fought for.”

**Unfair or Targeted Treatment**

An additional theme that arose in examination of the open-ended responses was unfair or targeted treatment by staff, faculty, or students due to participants’ military identity. In particular, participants perceived that they were asked to speak about the “horrors” of their military service or that their military knowledge was dismissed in academic conversations. One participated stated, “Military experience is not considered relevant to business class discussions. Non-veteran students assume an understanding of the military and thus feel qualified to dismiss insights based on military experience.” Another participant noted the differences in treatment based on the course,

> A lot of my answers would change if the question was pertaining to a specific class…my Math and Chemistry teachers did ask if I was a veteran and they thanked me for my service and seemed very impressed by it, [*sic*] but when my Psychology teacher asked me if I served she seemed to call on me less to answer questions, as if she did not want to deal with me. She also immediately asked me if I had seen combat, as if challenging my experience…I was…even more surprised that she went [*sic*] directly linking mass murderers to unstable veterans (this was a day after the shooting in Las Vegas)…I tried not to hold her comment against her as it was the day after the Las Vegas shooting and everyone was wound up pretty tight.

Furthermore, another participant noted,

> I've been made to feel that hold-over behaviors from being in the military (having clear expectations, structure, etc.) are flawed/inferior by faculty members,

> especially in regard to my field placement…My inquiries about having clear expectations and some semblance of structure…were responded to negatively and eventually resulted in me being removed from the placement.

**Competing Priorities and Continued Service**

Participants also noted difficulties with managing multiple priorities and balancing active service and student expectations. In particular, participants noted the challenges with balancing home life and schoolwork. One participant reported, "My situation is stressful because I have a lot of competing priorities. I have 2 [*sic*] jobs, school, my wife's business and family responsibilities. I need to be organized to make this work." Active duty participants indicated challenges with being able to fully receive the most from school because they were pulled away. One participant stated, "From my experience, it is very difficult to be currently serving and attending college. The balance of staying fit and doing homework after class is exhausting. I would feel better about school if I was not currently serving."

**Good Experiences**

Many participants noted that college was an overall good experience or that their specific school was very supportive in facilitating their success. Participants responded with, "I have generally had a positive experience in a very diverse class setting," and "I feel that picking this college was very lucky for me, member [*sic*] of the staff and faculty are Veterans themselves and the over all attitude towards the Military here is positive." Another participant specifically noted the reverence associated with his military status, "I am in Texas, where the military is revered. My answers may be different if I were in, say [*sic*] an Ivy League school, or in the Pacific Northwest or somewhere similar." Participants also noted specific support from veterans' offices and faculty and staff. One participant stated, "The administration and faculty have been

welcoming to me as a vet and welcome my experiences as they relate to the subject matter." Another participant noted, "The veteran support services at my university are outstanding. The staff in the student veteran assistance program go out of their way to ensure that student veterans are able to succeed here."

# CHAPTER V: DISCUSSION

In this chapter, I review the results of the present study. First, I offer tentative explanations of the primary findings and focus on the outcomes of testing the hypotheses. Next, I offer a review of the non-hypothesized findings from the preliminary analyses. I then provide clinical implications, limitations, and directions for future research. I end this chapter with a conclusion that addresses the key results of this study.

## Primary Findings: Hypotheses Testing

In this section, I review the primary findings and organize the findings by topic area (i.e., key demographic characteristics, life satisfaction, likelihood to persist) and research question. Within each section, I review the outcomes of the hypotheses testing process, addresses connections between the findings and prior research, and offer tentative explanations of the findings.

### Differences Based on Gender, Race and Ethnicity, and Sexual Orientation (RQ1)

In the analysis for RQ1, I sought to determine if significant differences would emerge within any of the primary variables (i.e., perceived discrimination, cultural congruity, college-related, life satisfaction, likelihood to persist) based on the key demographic characteristics of gender, race and ethnicity, and sexual orientation. In this section I organize the findings by each key demographic characteristics. Unfortunately, I was unable to perform analyses for race and ethnicity and sexual orientation because the sample sizes were too small. Therefore, in this section, I only offer discussion regarding the first and second hypotheses, addressing gender.

***Women's experiences with discrimination.*** I hypothesized that women would exhibit higher levels of discrimination than would men (H1a). This hypothesis was not supported. This hypothesis arose out of research highlighting experiences of stereotype threat (e.g., Beede et al., 2011; Nguyen & Ryan, 2008) and harassment (e.g., Yoon et al., 2010) reported by women in higher education. However, this sample of women veteran and military-connected students reflected on their experiences of discrimination specifically based on their military identity. It may be that women students who are also veterans or military-connected do not perceive discrimination in relation to their military identity because their marginalized identities (e.g., gender) have been historically oppressed within the education system and may be more salient to their experiences in college.

Additionally, it is possible that women veterans and military-connected students' challenging experiences are more reflective of differing lifestyles, competing priorities, and losing social connections, rather than discrimination. One participant who identified as a woman noted, "I haven't noticed anything directly negative about being a veteran at my school. I'm just a different person than most of the other students. I'm older, I have a family, and a fairly significant amount of life experience (comparatively)." Another participant who identified as a woman noted, "Pursuing higher education is hard for…everybody. It makes it a little harder for Veterans…because we're older…Not to mention experiences, having a significant other, possibly kids…[job employment] work…outside of your classes...It can get very overwhelming very quickly for Veterans."

However, it may also be that the sample of women in this study was not diverse enough to fully capture the discriminatory experiences that veteran and military-connected women perceive in college. It may be that a wider sample of women veterans and military-connected

students is necessary to elicit adequate variation of responses because, at least, a few of the participants did note negative experiences related to their military identity. One participant who identified as a woman noted, "It is very hard in general for veterans and military affiliated personnel to adjust to civilian life. It's even harder when you attend college. I hear other students make comments about military personnel in a negative manner all the time." Another participant who identified as a woman noted, "We are cast off by many departments."

***Women's likelihood to persist.*** I hypothesized that women would exhibit a higher likelihood to persist in college than would men (H1b). This hypothesis was not supported. This study is cross-sectional and not longitudinal, which was the impetus for using the term "likelihood to persist," rather than the term persistence. However, the scores on the measure (see Appendix G) I used to assess participants' likelihood to persist have demonstrated predictive validity at a rate of 78.5% for persistence (Pascarella & Terenzini, 1980). Given the predictive validity of the measure, this result was surprising as national data (NCES, 2014; Ross et al., 2012) suggests that women tend to persist in college more than men.

The current finding may offer a distinct perspective on gender differences than seen before in the literature; most notably, it may demonstrate potential benefits of military service. Specifically, military service may assist in building structure and consistency that supports the likelihood to persist in higher education. Prior researchers argued that the difference in persistence rates among men and women could be due to the socialization women receive as young girls to be obedient and cooperative (Conger & Long, 2010; Owens, 2016), which could lead to a stronger work ethic. Men within the veteran and military-connected student population may be just as likely as their female peers to persist due to the discipline (Snider, 1999), structure (Brown & Gross, 2011; Raybeck, 2010), and values of hard work (Raybeck, 2010; Tierney,

1988) and obedience (Daley, 1999; Raybeck, 2010; Soeters et al., 2006) that are built into the culture of the military. Moreover, military students may view a course syllabus akin to orders (N. Osborne, personal communication, March 15, 2016) and, thus, do whatever they can to meet the academic demands.

Conversely, the lack of differences in likelihood to persist between men and women in this study may be due to a lack of academic engagement for women. Nora et al. (1996) found that faculty interactions positively related to women's persistence decisions. Moreover, Sax et al. (2005) found that honest feedback from faculty increased well-being, academic performance, and drive to achieve more for women than for men. Additionally, they found that negative interactions with faculty decreased community satisfaction more for women than for men. Veteran and military-connected women students may not persist more than men because their military socialization (e.g., hegemonic masculinity) may decrease their likelihood of engaging with faculty in ways that could be seen as weakness (e.g., seeking support, feedback, and/or community). Moreover, women veterans may not engage as much because of lack of social connections. One participant who identified as a woman noted, "I feel there is a lack of understanding or social connection for veteran students, primarily females because of the small portion they account for."

### Life Satisfaction as Related to Perceived Discrimination, Cultural Congruity and College-Related Gains for Veteran and Military-Connected Students

In this section, I review the findings connected specifically to my dependent variable of life satisfaction. In terms of RQ2, I sought to determine if perceived discrimination, cultural congruity (i.e., congruity between military and higher education), and college-related gains were related to life satisfaction. In terms of RQ4, I sought to determine if any of the key demographic

characteristics (i.e., gender, race and ethnicity, sexual orientation) moderated any of the relationships between perceived discrimination, cultural congruity, or college-related gains and life satisfaction. Unfortunately, I was not able to conduct the analysis for RQ4 because the sample sizes were too small for race and ethnicity and sexual orientation. Therefore, I only offer possible explanations for the findings of each hypothesis for RQ2.

***Perceived discrimination.*** Based on prior research (e.g., Stronge et al., 2015; Verkuyten, 2008), I hypothesized that perceived discrimination would be negatively associated with life satisfaction (H2a). This hypothesis was not supported. The current sample reported low levels of perceived discrimination based on their military identity, as evidenced by the positive skewness (i.e., majority low scores) indicated in the results section (see p. 79). Additionally, what little discrimination they did perceive was not related to life satisfaction. Whereas, I based this hypothesis on previous research regarding life satisfaction and discrimination, past research has focused on discrimination based on ethnic identity.

Although discrimination based on race and ethnicity is seen throughout larger societal contexts, I argue that perceived discrimination based on military identity may be particularly salient in higher education institutions. Past qualitative research has indicated veteran and military-connected students experience negative interactions within higher education, particularly in discussions about war (Ackerman, et al., 2009; Elliot et al., 2011). Specifically, Akerman et al. (2009) referred to comments directed at military-connected students in which they were called "terrorists" and "traitors" by faculty and other students. Items from the perceived discrimination measure specifically related their experience within their institution (e.g., "I have observed discriminatory words, behaviors, or gestures directed at military or veteran students at this institution"). Perhaps, veteran and military-connected students do not

experience similar types of perceived discrimination outside of the context of higher education such that any perceived discrimination at the institutional level is not related to their *overall* life satisfaction. Moreover, military members are sometimes revered and honored as heroes with special discounts, parades, and other award ceremonies (Deresiewicz, 2011), which all relate to potential privilege. Therefore, this finding may make sense when considering that any perceived discrimination experienced in the context of higher education could be mitigated by potential reverence in the larger societal context.

***Cultural congruity.*** I hypothesized that cultural congruity would be positively associated with life satisfaction (H2b). This hypothesis was not supported. It appears that veteran and military-connected students' sense of congruity between the higher education and military cultures is not relevant to their life satisfaction. I based this hypothesis on the assumption that military identity would be a large part of the participants' identity construction, which may not be the case. Potentially, cultural fit may be less important for veteran and military-connected students due to their multiple roles outside of being military personnel and outside of being students, which has been argued is the case for other non-traditional student groups (Bean & Metzner, 1985). For example, veteran and military-connected students are more likely to be married than their non-military peers (U.S. Department of Education, 2016). In fact, over half of the participants in this study were married, which may indicate that veteran and military-connected students align their values and membership more with being family members rather than military personnel in higher education. However, though the measure I used (i.e., military centrality, see Appendix B) to assess the level at which the participants' saw the military as a core part of their identity was not statistically significant enough to be considered in the analysis to address this question, it was correlated with life satisfaction (see Table 6, p. 82). Therefore,

there may be some moderating effect between cultural congruity and life satisfaction based on the degree to which participants see the military as a core part of their identity.

***College-related gains.*** I hypothesized that college-related gains would be positively associated with life satisfaction (H2c). This hypothesis was supported. This finding is consistent with the underlying assumption of the gain/loss framework that gains will be positively associated with desirable outcomes (Servaty-Seib, 2014). It is also in line with prior research indicating positive relationships between perceived gains and benefit finding (Servaty-Seib, 2014) and college-related belongingness (Miller & Servaty-Seib, 2016).

The more college-related gains participants' perceived the higher they rated their life satisfaction. Items from the college-related gains measure assessed the gains and losses participants' associated with being in college in domains such as their role as a productive member of society, hope, life satisfaction, and purpose in life. These life domains are directly aligned with items from the life satisfaction measure, which assessed idealness and excellence related to the conditions of life. It may be that the more participants were able to perceive gains related to being in college, the more they developed a sense of direction and hopefulness about their lives in general. College degree attainment is generally considered an activity that will lead to greater quality of life (Pascarella & Terenzini, 2005). These gains may be reflected in the positive experiences noted by many participants (i.e., "Personally, I have had an amazing college experience.")

On the other hand, veteran and military-connected students' may already exhibit high levels of life satisfaction prior to coming to college and, therefore, be predisposed to perceive more gains connected with the college experience. They may have entered college with a sense of accomplishment connected with their military service. Also, the prestige, potential privilege,

and honor of service to the U.S. military may have increased their life satisfaction and thus their likelihood of perceiving gains in college. Additionally, as I discussed previously, a majority of participants in this study were married. Whereas relationship status did not meet the statistical significance needed to be included in the analysis for this research question, there were significant differences found between married and divorced participants' and their life satisfaction (see Appendix O), such that married participants rated their life satisfaction as higher than divorced participants. Therefore, there may be some moderating effect between college-related gains and life satisfaction based on relationship status.

### Likelihood to Persist as Related to Perceived Discrimination, Cultural Congruity and College-Related Gains for Veteran and Military-Connected Students

In this section, I review the findings connected specifically to my dependent variable of likelihood to persist. In terms of RQ3, I sought to determine if perceived discrimination, cultural congruity, and college-related gains were related to likelihood to persist. In terms of RQ5, I sought to determine if the any of the key demographic characteristics (i.e., gender, race and ethnicity, sexual orientation) moderated any of the relationships between perceived discrimination, cultural congruity, or college-related gains and likelihood to persist. Unfortunately, I was not able to conduct the analysis for RQ5 because the sample sizes were too small for race and ethnicity and sexual orientation. Therefore, I only offer tentative explanations for the findings of each hypothesis for RQ3.

***Perceived discrimination.*** Based on prior research and theory, I hypothesized that perceived discrimination would be negatively associated with the likelihood to persist (H3a). This hypothesis was not supported. Whereas, this finding is incongruent with research suggesting that perceived discrimination and problematic interactions with peers and faculty negatively

contribute to persistence decisions (e.g., Nora & Cabrera, 1996; Tinto, 1975), this study focused on discrimination based on military status and previous research has focused primarily on discrimination based on race and ethnicity. As discussed previously, this sample of students perceived little discrimination based on their military status. Therefore, it may be that what little discrimination was perceived did not negatively affect the persistence decisions of these students. However, there may be moderating effects connected with other demographic variables (i.e., gender, race and ethnicity, sexual orientation) that were not tested due to low representation in this study.

It is also possible that the majority of universities that were represented in this study provided an environment that was inclusive to veteran and military-connected students. Whereas campuses represented in this study did not differ on military friendliness (see preliminary analyses), there may be other factors about the university environments that were not addressed in this study that provided support and or the reverence to veteran and military-connected students. In fact, one participant noted the specific reverence at his institution (see p. 101).

***Cultural congruity.*** I hypothesized that cultural congruity would be positively associated with likelihood to persist (H3b). This hypothesis was not supported. This finding is somewhat surprising, as Weber (2012) found that cultural congruity and social support were the only variables related to persistence for military/veteran students and that cultural congruity was the better predictor of persistence. However, when combining the findings of the current study, it may be that perceived discrimination is a more important variable with regard to likelihood to persist than is the congruity that participants view between the military and higher education cultures. Perhaps military students are not troubled by incongruity they may encounter such that it does not connect at all with their plans to remain in college.

The results of this study may suggest that non-traditional students, in this case military and veteran-connected students, are less concerned with the internal process of their congruence or fit based on identity factors as much as they are concerned with the external experience of negative comments or prejudices based on identity factors in making persistence decisions. Bean and Metzner (1985) argued that the congruence between the person and the social environment is potentially not as important a factor for non-traditional students because outside factors such as family commitments, finances, and employment are more relevant. Moreover, Davidson and Wilson (2013) challenged that social integration needs to be redefined particularly for non-traditional students due to the variability in social experiences for commuter and online students.

***College-related gains.*** I hypothesized that college-related gains would be positively associated with likelihood to persist (H3c). This hypothesis was supported. This finding makes sense within the literature of the gain/loss framework (Servaty-Seib, 2014) and Tinto's (1975) theory of college persistence. More specifically, the college-related gains measure (i.e., PILES) assessed the level of gains the participants perceived on items such as access to employment opportunities, educational achievement, and control over life. The more that veteran and military-connected students found that college benefited their lives the higher they reported their likelihood to continue their education. Perhaps, the gains they relate in the college experiences could even mitigate any losses they experienced in separating from the military. Just as Tinto (1975) described an ongoing and cyclical cost-benefit analysis in the re-evaluation of the goal commitment to stay in college, the gain/loss framework would suggest that higher gains would be associated with the desired outcome of college retention.

On the other hand, veteran and military-connected students may exhibit higher levels of perseverance and determination based on the cultural expectations of the military, such that their

commitment to persisting in college provides a positive lens through which to evaluate the college experience. Veteran and military-connected students may go through a type of positive content filtering where they are able to assess more gains in college because they are fully committed to persisting. For example, their commitment to persistence may increase their views of hopefulness and self-esteem, two key existential gain items on the PILES.

## Non-hypothesized Findings from Preliminary Analysis

In this section, I review the findings from the preliminary analysis that I did not hypothesize. Specifically, I describe and offer possible explanations for the findings that emerged with regard to the demographic variables of SES, desirable or undesirable college experience, and receipt of mental health benefits.

### SES

Significant positive relationships emerged between SES and the primary study variables of cultural congruity, college-related gains, life satisfactions, and likelihood to persist, all but one of the primary variables in the present study (i.e., perceived discrimination). Socioeconomic status may be a particularly salient variable for veteran and military-connected students given that SES has been found to be a relevant factor for joining the military (e.g., Lutz, 2008; Wang et al., 2012). It may be that low SES students feel excluded by experiences of classism in higher education such that they do not perceive cultural congruence between the institution and any of their identity factors, most specifically here their military identity. In support of this point, Langhout, Drake, and Rosselli (2009) found that classism mediated the relationship between social class and school belonging. Additionally, students with higher SES may perceive more college-related gains due to the privilege of access to added educational experiences (e.g., study

abroad) that higher socioeconomic means may provide. Moreover, students with lower SES may not perceive as many college-related gains or likelihood to persist, if they have economic conditions that require they work one or more jobs while attending school. Additionally, low SES veteran and military-connected students may not perceive as many college-related gains because they are spending more time working than their higher SES peers. Consistent with this assertion, Walpole (2003) found that low SES students reported less time in social and cultural campus groups and spent more time working while in college than high SES students.

Additionally, SES had the strongest correlation to life satisfaction than any other variable in the study. This finding is consistent with previous research that has indicated that SES is a particularly relevant factor for the life satisfaction of adolescents (i.e., $9^{th}$-$12^{th}$ grade; Ash & Huebner, 2001), adults (i.e., 18 and older; Barger, Donoho, & Wayment, 2009; Louis & Zhao, 2002), and older adults (i.e., 60 and older; Bishop & Poon, 2007). Increased stress related to financial challenges and less access to quality healthcare could be reasons for participants' diminished perception of life conditions and/or their of lack of belief that they have gotten the important things they want in life (e.g., Ash & Huber, 2001; Barger et al., 2009, Louis & Zhao, 2002). Moreover, working multiple jobs or long hours resulting in decreased time with family could also lead to lower life satisfaction for veteran and military-connected students. One participant noted in the open-ended response, "I'm already anxious about the impending financial insecurity" when discussing challenges with being dismissed from field-placement and insecurity about summer work.

**Desirable and Undesirable College Experience**

Significant differences emerged based on the last question of the college-related gains measure (i.e., PILES), in which participants indicated whether they considered their time in college as a desirable or undesirable experience. Differences emerged among all the primary variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist). Participants who considered their time in college as desirable reported less perceived discrimination as well as and greater cultural congruity, college-related gains, life satisfaction, and likelihood to persist than those participants who considered their time in college as an undesirable. These findings may indicate that people who see events as largely negative perceive higher rates of negative outcomes, as suggested by prior research on personality and subjective well-being (Diener, Oishi, & Lucas, 2003). Therefore, it may be that shifting the perception of life events could help individuals to cope with negative experiences (i.e., perceived discrimination) and strengthen positive outcomes (i.e., cultural congruence, college-related gains, life satisfaction, likelihood to persist).

Conversely, these findings may suggest that discriminatory experiences within the university or a lack of life satisfaction could contribute to viewing college as an undesirable experience. Therefore, more positive college experiences (i.e., decreased discrimination, increased cultural congruity, enhanced college-related gains) could increase the chances that veteran and military-connected students perceive the college experience as desirable. Moreover, promoting a general sense of life satisfaction may also contribute to a general sense of desirability in regard to the college experience.

**Receiving Mental Health-Related Medical Benefits**

Significant differences emerged based on receiving medical benefits for mental health issues related to service with regard to perceived discrimination, cultural congruity, and the likelihood to persist, such that participants who endorsed that they were receiving mental health benefits perceived more discrimination and lower cultural congruity, and exhibited a lower likelihood to persist than participants who stated they were not receiving medical benefits for mental health-related issues due to their service. The receipt of mental health-related medical benefits due to service may indicate that these participants are receiving treatment for clinical issues such as post-traumatic stress disorder (PTSD), acute stress disorder, or other clinical conditions related to their time in the military. The stigmas associated with mental health may increase students' perceptions of being "othered" by their military experiences and thus decrease their perceptions of cultural congruity based on their military status. These findings are aligned with previous research by Weber (2012), who also found significant correlations between PTSD, depression, anxiety, anger, cultural congruity, and likelihood to persist among military/veteran students.

On the other hand, it may be that negative experiences in counseling, including being over-pathologized or stereotyped by clinicians, could lead to more perceived discrimination for veterans and military-connected student who were receiving mental health-related medical benefits. In the context of therapeutic services, Currier, McDermott, and McCormick (2017) found that veteran students held more negative beliefs about treatment than their civilian peers. They suggested that providers may not have the cultural competence to appropriately treat this student population, which may then lead to veteran and military connect clients internalizing a sense of judgment about their military identity. Additionally, Carrola and Corbin-Burdick (2015)

suggested that counselor bias about veteran and military service members may impede counselors' ability to see the strengths that veteran and military clients bring into the counseling relationship.

## Clinical Implications

In this section, I offer clinical implications of the findings from the present study. I organize the clinical implications by a) individual and group counseling and b) psychoeducation and outreach programs. Under these areas, I offer potential intervention strategies to enhance the college experience of veteran and military-connected students.

### Individual and Group Counseling

It may be particularly important to use counseling strategies that focus on shifting perspectives around perceived gains and losses related to the experience of college and the perception of college as a desirable experience. In particular, the positive relationships between college-related gains and both life satisfaction and likelihood to persist indicate the potential importance of a gains orientation. Practically, counselors could work with veteran and military-connected students to assess both the gains and losses they perceive in relation to college at different points in time. Using different assessment points could allow for conversations about the shifts and changes that may occur as students develop and grow through the educational system and such conversations could enhance students' purpose in life and control over their future (e.g., gains, life satisfaction). Assessing losses, in connection with gains, in domains such as quantity of friendships or even self-esteem could help veteran and military connected students in gaining insight regarding their college experience and illuminate the possibly mixed psychological responses they may have to the experience. Moreover, counselors could help

veteran and military-connected students move toward more acceptance and psychological flexibility to accept the fluidity of life and the natural gains and losses associated with the college experience. Helping veteran and military-connected students increase their psychological flexibility may allow them to defuse from negative thoughts, feelings, beliefs, and/or experiences that impede them from living contented lives.

**Psychoeducation and Outreach Programs**

Additionally, strength-based outreach programs focused on community building and psychoeducation around skills acquisition may help mitigate stigmas or challenges veteran and military-connected students associate with receiving mental health-related medical benefits. These programs are of utmost importance given the differences among perceived discrimination, cultural congruity, and the likelihood to persist associated with receiving mental health-related medical benefits due to their service. Specifically, Carrola and Corbin-Burdick (2015) suggest that enhancing veterans' social and cultural development can decrease isolation and increase coping skills.

Moreover, college counseling centers could provide cultural awareness outreach seminars and trainings targeted at decreasing possible bias clinicians may have about veteran and military-connected students. Decreased clinician bias may help support a better working alliance with veteran and military-connected students who access support resources, which may then be connected with decreases in veteran and military-connected students' perceptions of discrimination, enhance their cultural congruity, and increase their likelihood to persist.

Veteran support offices can focus on educating university personnel about military culture and implementing informed interventions to serve as a support system to increase the

gains associated with being in college to positively affect their life satisfaction and likelihood to persist. Faculty and staff would benefit from learning more about not asking veteran and military-connected students to speak for the military as an entity or single out students based on their service status. Veteran support offices could offer awareness training seminars aimed at helping faculty and staff understand what words could be perceived as negative, or experiences could be perceived as prejudicial by veteran and military-connected students (e.g., Purdue University Green Zone Training; "Green Zone," 2019). Specifically, Osborne (2013) offers suggestions of questions to avoid when working with veterans such as, "Did you kill anyone?" and "Do you think we should be over there" (p. 255). These types of interventions could serve as a way to build a more inclusive community to positively affect veteran and military-connected students' ability to interact socially, their happiness, and their size of support network.

Additionally, veteran support offices need to be aware of and attuned to the competing priorities of veteran and military-connected students. It is often difficult to engage this student population in activities and would likely benefit veteran support offices to poll this student population to see what how they would like to be engaged. One possibility is to host events and activities that include families and other members of veteran and military-connected students' support systems. A theme in the open-ended response was competing priorities, which included family obligations. Therefore, this student population may be more apt to get involved in activities that also involve their families.

## Limitations

There are several limitations of the present study and they can be categorized into three areas: sampling and sample recruitment, research design and statistics, and measurement. I briefly explain the limitations and the threats to validity.

### Sampling and Sample Recruitment

The present study is limited by its sample and sample recruitment. Perhaps most importantly, the study was limited in the diversity of the sample. I made specific hypotheses related to gender, race and ethnicity, and sexual orientation that were not addressed due to the lack of representation within the sample. Given that the sample consisted primarily of Anglo American/White, heterosexual men, this study is not representative of marginalized racial and ethnic, gender identity, and sexual orientation minority groups of veteran and military-connected students. Additionally, these data were collected mainly from campuses in the Midwest (see Appendix H-I). The present sample is not representative of the experiences of veteran and military-connected students across the U.S; therefore, the findings cannot be generalized to all regions.

Additional limitations exist based on my recruitment approaches (i.e., online survey, snowball sampling, Amazon MTurk, email communication). My use of online surveying and snowball sampling creates many challenges. Namely, not everyone has access to computers or feels competent to use them (Goree & Marszalek, 1995). Given that veteran and military-connected students are often from lower socioeconomic means (Bareis & Mezuk, 2016; Lutz, 2008) this sample may not be representative of students who were financially restricted and do not have access to computers. Moreover, the use of snowball sampling (i.e., through veteran offices, Facebook) limited the control I had over reaching my target population (Noy, 2008). As I

mentioned in the data screening section, there were several participants who took the study through Amazon MTurk and offered responses that appeared false in order to complete the study and receive payment. Due to the nature of immediate payment and the incentive to complete the study, the use of Amazon MTurk could be a limitation. Whereas this tool is widely used in the research community, the validity of responses may be questioned. Bartneck, Duenser, Motchanova, and Zawieska (2015), found that Amazon MTurk responses were significantly different than the other recruitment methods; however, they argued that the difference was nominal and not practically significant. Therefore, Amazon MTurk could be a viable recruitment tool although limitations to its service exist.

Additionally, issues arose in dissemination of the study to the 2-year schools. In particular, technological difficulties limited the dissemination to many of the 2-year institutions. Many of the emails did not reach the veteran services support staff, which may have been due to firewall protections regarding spam emails. I did my due diligence to reach out to these institutions, but failed to reach all of them. I was only contacted by three 2-year institutions who confirmed they had sent the email to their veteran and military-connected students.

**Research Design**

Limitations exist with regard to the cross-sectional nature of the study. This study was conducted at a single point in time, which limits the information about persistence to the "likelihood to persist" rather than the actual outcome of persistence. Persistence is better measured longitudinally (Tinto, 1975) so that the persistence variable can be practically validated. Additionally, the lack of longitudinal information about all variables does not account for changes that occur over time. For example, it is possible for veteran and military-connected

students perceive more gains at the end of the school year rather than the beginning of a school year because of potential growth over time. This study was conducted at the beginning of the academic year, which may limit the nature of the information gathered. Moreover, the design was correlational; therefore, causation cannot be ascertained.

Another issue related to design is the use of self-report data. Specifically, issues with honesty, introspection, current mood state, and cultural differences may arise (Garcia & Gustavson, 1997). Specifically, self-report data may increase the chances of socially desirable responses among participants. For example, veteran and military-connected students may have difficulty being honest about their experiences in college due to an expectation that they grin and bear whatever experiences they are having. Moreover, self-report data requires participants to be introspective and somewhat self-aware in order to genuinely report their experiences so variations in self-awareness can affect the validity of self-reported data. Additionally, current mood states (e.g., sadness, happiness) could negatively or positively skew participants' responses. Furthermore, cultural differences may affect how people understand concepts on measures and answer questions about negative experiences (Garcia & Gustavson, 1997).

Moreover, the design of the study was limited by that lack of comparison in the experiences between veteran and military-connected students and their non-military peers. The design was intentional in order to obtain a larger, more diverse sample of veteran and military-connected participants. However, the choice to obtain participants from multiple institutions limited the capacity of the design to focus solely on veteran and military-connected students and not their non-military peers. It may be that similar findings would arise (e.g., positive association between gains and likelihood to persist) within the non-military student population.

In addition, the study is limited by my choices related to the particular variables of focus and the information gathered. For example, additional measures assessing personality and temperament, coping skills, pre-entry attributes (e.g., secondary education, parents' education), grades, engagement in school activities, school major, marginalized identity discrimination, and mental health status could have given a fuller picture of veteran and military-connected students lives and may have added valuable information. Furthermore, given the obvious connection with SES, it would have been beneficial to obtain more information about socioeconomic variables (e.g., childhood SES, access to basic needs).

Furthermore, in order to retain as much power as possible, I did not examine which of factors of college-related gains (i.e., existential, career, friendship, romantic) were most salient for veteran and military-connected students. This study is limited to the information of college-related gains broadly, but does not offer specific information about the types of gains. Knowing the types of gains that were most salient could better inform programming with this student population.

***Measurement.*** The present study is limited by the measurement tools I used. Specifically, the perceived discrimination measure (i.e., PPD) may exhibit some challenges with regard to validity. Although specific items from the measure have performed well in studies where they have been used in combination with assessments of student adjustment (Cabrera et al., 1999; Eimers & Pike, 1997; Nora & Cabrera, 1996), I cannot be certain that the full-scale version was valid for my specific population. However, I undertook multiple efforts to retain the integrity of the measure. I adapted the PDD (i.e., perceived discrimination) to fit the cultural identity of veteran and military-connected students. Specifically, I changed questions regarding racial and ethnic identities to reflect military cultural identity. Because this adapted version has not been

validated with a military population, I cannot be certain that my adaption was valid for veteran and military-connected students. It was encouraging, however, that the internal consistency reached an adequate level (i.e., .85). Additionally, prejudices or negative interactions based on military identity may be experienced differently than racial and ethnic discrimination. It is possible that this measure truly did not tap the experiences of negative interactions based on military identity. To this point, whereas I stated in the directions to answer questions based on their military identity, only three of the eight questions included in the measure specifically asked about discrimination based on veteran or military status.

Additionally, I made an error while creating the scale participants used to rate each item on the measure for cultural congruity (i.e., CCS). Specifically, when I created the online version of the CCS, I reduce the seven-point scale to a six-point scale. So, rather than rating the items from one to seven participants rated items from one to six. The reduction of this point may have decreased the potential relationships that could have arisen between cultural congruity and life satisfaction or likelihood to persist.

Moreover, I adapted a subscale of the Multidimensional Inventory of Black Identity (MIBI; Sellers et al., 1997) in order to measure the degree to which military identity was a "core part of an individual's self-concept" (p. 806). Specifically, I exchanged the word "Black" with "service member." Similarly to the PPD scale, this measure may not have truly tapped the degree to which participants aligned their identity with military culture. There may have been other measures that would have gotten to the core of this concept; though, I do believe I did my due diligence in the search for identity measures. Additionally, although the adapted version of the measure was not validated using similar samples from prior studies, the internal consistency was adequate (i.e., .84).

The open-ended question focused on, not only, participants' comments about their experiences in college but also any feedback they may have had about the study. Participants identified a few areas of limitations related to the questions asked and the length of the survey. Specifically, one participant noted the length of the survey was too long. Furthermore, lack of questions about feeling behind traditional classmates, online education, and expected graduation were noted as limitations.

## Directions for Future Research

There are several areas for future research that would be interesting and important to explore with regard to veteran and military-connected students' college experiences. Obtaining a larger and more diverse sample (e.g., race and ethnicity, region) would be paramount in order to get a fuller picture of the impact of intersecting identities and and moderating factors. Analyzing the intersections of identities would offer vital information to create programming to meet the needs of veteran and military-connected students from marginalized communities. There are a multitude of factors including privilege and oppression, microaggressions, racism, perceived discrimination, access and economic barriers, and cultural and familial message that likely influence these outcomes and deserve further attention in future research. In addition, because there was a correlation between perceived discrimination and life satisfaction and likelihood to persist, there was likely a variable within this study that moderated the experience of discrimination, perhaps cultural congruity or the association of gains in relation to their college experience.

Perhaps most importantly, a longitudinal study would offer a more accurate depiction of the changes in variables over time and the actuality of persistence. It would be interesting to see how the shift in gains over time may or may not align with persistence decisions in the long run.

Moreover, and with regard to recruitment, it will critical for future researchers to cultivate good relationships with programs in order to increase research dissemination and involvement motivation among veteran and military-connected students. This population of students is often overburdened with requests for research participation and may need more of an incentive, by way of personal relationship, to feel motivated to want to participate. Moreover, staff and faculty working with veteran and military-connected students may feel understandably protective about over burdening their students with research requests.

It may be beneficial to explore variables such as academic aspirations (e.g., major), early childhood educational barriers and discrimination, mental health status, and temperament and coping skills, all of which could have an effect on veteran and military-connected students' experiences in college. Specifically, examining veteran and military students' majors may provide insight into the degree to which they feel supported in particular fields. There may be some fields of study that are more or less welcoming of veteran and military-connected students.

Moreover, examining childhood experiences in combination with educational barriers and discrimination illuminate the effects on adult mental health outcomes and thus may offer insight into areas of early intervention. Additionally, investigating the connection between receiving mental health-related benefits and higher perceived discrimination, and lower cultural congruity and likelihood to persist could offer mental health clinicians additional information regarding points of intervention, perhaps with clients or in their own clinical training (e.g., cultural awareness training). Furthermore, assessing the possible relationship between

temperament and perception of gains may help inform the type of coping skills veteran and military-connected students would experiences as most beneficial. Lent (2004) suggested that increasing self-efficacy and enhancing coping strategies could help mitigate personality issues and the impact of stressful life events, potentially enhancing the outcomes of life satisfaction and the likelihood to persist.

Future research could also focus on the difference between veteran and military-connected students and non-military students. It is important to understand what is truly unique about veteran and military-connected students' experiences by comparing them to a sample of non-military students. Specifically, it would be interesting to see what differences there may be between the two groups on the types of gains associated with college outcomes, or whether cultural congruity based on identity factors other than military identity would provide additional information. As noted by one participant, there may be a perception among veteran and military-connected students that they feel behind in their education as compared to non-military, traditional aged students.

Finally, the finding that women and men did not differ in their likelihood to persist warrants further investigation. Future studies could focus on the aspects that would potentially contribute to a increasing the likelihood to persist among women veteran and military-connected students. Perhaps issues such as not asking for support could be mitigated by using strengths-based approaches that capitalize on their military skills. I tentatively offered that military service could enhance men's academic skills through increased structure and discipline. However, other factors could be at play, such as academic readiness, socialization, access of academic support resources, mental health status, and trauma.

## Conclusion

The purpose of this study was to build upon the existing qualitative and limited quantitative literature in order to quantitatively examine particular experiences and perceptions (i.e., discrimination, cultural congruity, college-related gains) of veteran and military-connected students in relation to their life satisfaction and likelihood to persist. Although, many of the hypotheses were not supported, findings did emerge that provide catalysts for future research and guidance for mental health clinicians and veterans support personnel. Specifically, the relationships that emerged between college-related gains and life satisfaction and likelihood to persist suggest that the appraisal of gains associated to life events is an important factor for well-being and educational attainment.

Despite the limitations regarding sample and generalizability, design, and measurement, the present study adds to the literature base regarding veteran and military-connected students. The findings suggest the need for additional research regarding persistence and the intersections among factors such as SES, race and ethnicity, gender, and accessing mental health benefits and the potential clinical importance of factors such as perceptions of college-related gains and military-related discrimination within institutions of higher education for veteran and military-connected students.

# REFERENCES


Ackerman, R., DiRamio, D., & Garza Mitchell, R. L. (2009). Transitions: Combat veterans as college students. *New Directions for Student Services, 126,* 5-14. doi: 10.1002/ss.311

ACLU. (2017). *Non-discrimination laws: state by state information-Map.* Retrieved from https://www.aclu.org/map/non-discrimination-laws-state-state-information-map

Allen, W. R., & Solórzano, D. (2001). Affirmative action, educational equity and campus racial climate: A case study of the University of Michigan Law School. *Berkley La Raza Journal, 12*(2), 237-363. doi:10.15779/Z388D40

APA. (2002). *Guidelines on multicultural education, training, research, practice, and organizational change for psychologists.* Retrieved from http://www.apa.org/ pi/oema/resources/policy/multicultural-guidelines.aspx

APA. (2004). *Report of the Task Force on Sexual Orientation and Military Service*. Retrieved from http://www.apa.org/pi/lgbt/resources/military-service.pdf.

APA. (n.d.). *Lesbian, gay, bisexual, transgender* [Topic]. Retrieved from http://www.apa.org/ topics/lgbt/

Ash, C., & Huebner, E. S. (2001). Environmental events and life satisfaction reports of adolescents. A test of cognitive mediation. *School Psychology International, 22*(3), 320-336.

Bachman, J. G., Segal, D. R., Freedman-Doan, P., &. O'Malley, P. M. (2000). Who chooses military service? Correlates of propensity and enlistment in the U.S. armed forces. *Military Psychology, 12*(1), 1-30. doi: 10.1207/S15327876MP1201_1

Baldwin, J. R., Faulkner, S. L., Hecht, M. L., & Lindsley, S. L. (Eds.). (2006). *Redefining culture: Perspectives across the disciplines.* Mahwah, N.J.: Lawrence Erlbaum Associates.

Baltes, P. B. (1987). Theoretical propositions of lie-span development psychology: On the dynamics between growth and decline. *Developmental Psychology, 23*(5), 611-626. Retrieved from library.mpib-berlin.mpg.de/ft/pb/ pb_theoretical_1987.pdf

Bareis, N., Mezuk, B. (2016). The relationship between childhood poverty, military service, and later life depression among men: Evidence from the health and retirement study. *Journal of Affective Disorders, 206,* 1-7. doi:10.1016/j.jad.2016.07.018

Barger, S. D., Donoho, C. J., & Wayment, H. A. (2009). The relative contributions of race/ethnicity, socioeconomic status, and social relationship to life satisfaction in the United States. Quality of Life Research, 18(2), 179-189. doi:10.1007/s11136-008-9426-2

Barnhart, D. (2002). *The relationship of academic and social integration to veterans' educational persistence.* (Unpublished doctoral dissertation). Retrieved from https://eric.ed.gov/?id=ED523012

Bartneck, C., Duenser, A., Moltchanova, E., & Zawieska, K. (2015). Comparing the similarity of responses received from studies in Amazon's Mechanical Turk to studies conducted online and with direct recruitment. *PLoS ONE 10*(4): e0121595. https://doi.org/ 10.1371/journal.pone.0121595

Bean, J. P., & Metzner, B.S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research, 55*(4), 485-540. Retrieved from http://www.jstor.org/stable/1170245

Beede, D., Julian, T., Landon, D., McKittrick, G., Khan, B., & Doms, M. (2011). *Women in STEM: A gender gap to innovation* (Economics and Statistics Administration Issue Brief #04-11). Retrieved from https://papers.ssrn.com/sol3/papers.cfm? abstract_id=1964782

Bellamy, S. (2010). Towards a cultural understanding of academic worlds. *International Review of Business Research Papers, 6*(5), 46-57. Retrieved from https://www.bizresearch papers.com/4.%20Bellamy%20S.pdf

Bernardi, B. (Ed.). (1977). *The concept and dynamics of culture*. The Hauge, Paris: Mouton Publishers.

Betencourt, H., & Regeser Lopez, S. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist, 48*(6), 629-637. doi: 10.1037/0003-066X.48.6.629

Big 10 Academic Alliance. (n.d.). Retrieved from http://www.btaa.org/about/member universities.

Bishop, A. J., Martin, P. & Poon, L. (2006) Happiness and congruence in older adulthood: a structural model of life satisfaction, Aging and Mental Health, 10:5, 445-453. doi: 10.1080/13607860600638388

Bolaffi, G., Bracalenti, R., Braham, P., & Gindro, S. (Eds.). (2003). *Dictionary of race, ethnicity, and culture.* London, UK: Sage Publications Ltd.

Boldry, J., Wood, W., & Kashy, D. A. (2001). Gender stereotypes and the evaluation of men and women in military training. *Journal of Social Issues, 57*(4), 689-705. doi: 10.1111/0022-4537.00236

Brown, P.A, & Gross, C. (2011). Serving those who have served: Managing veteran and military student best practices. *The Journal of Continuing Higher Education, 59*(1), 45-49. doi: 10.1080/07377363.2011.544982

Brown, R. D., Clarke, B., Gortmaker, V., & Robinson-Keilig, R. (2004). Assessing the campus climate for gay, lesbian, bisexual, and transgender (GLBT) student using a multiple perspectives approach. *Journal of College Student Development, 45*(1), 8-26. doi: 10.1353/csd.2004.0003

Burks, D. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of "Don't Ask, Don't Tell"? *American Psychologist, 66*(7), 604-613. doi: 10.1037/a0024609

Burton, K. (2011, August 29). Civilian life vs military life. *Westman Journal*. Retrieved from http://www.westmanjournal.com/news/local-news/civilian-life-vs-military-life-1.1404673

Cabrera, A. F., & Nora, A. (1994). College students' perceptions of prejudice and discrimination and their feelings of alienation: A construct validation approach. *Review of Education, Pedagogy, and Cultural Studies, 16*(3-4), 387-409. doi: 10.1080/1071441940160310

Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *The Journal of Higher Education, 70*(2), 134-160. Retrieved from http://www.jstor.org/stable/2649125

Camera, L. (2015, October 21). Women still underrepresented in STEM fields. *U.S. News*. Retrieved from https://www.usnews.com/news/articles/2015/10/21/women-still-underrepresented-in-stem-fields

Campbell, D. (1993). Women in combat: The World War II experience in the United States, Great Britain, Germany, and the Soviet Union. *The Journal of Military History, 57*(2), 301-323. Retrieved from americanhistoryprojects.com/downloads /ww2/combat.pdf

Carey, K. (2015, September 13). Gaps in earning stand out in release of college date. *TheUpshot*. Retrieved from https://www.nytimes.com/2015/09/14/upshot/gaps-in-alumni-earnings-stand-out-in-release-of-college-data.html?_r=0

Carrola, P., & Corbin-Burdick. M. F. (2015). Counseling military veterans: Advocating for culturally competent and holistic interventions. *Practice, 37*(1), 1-14. doi: 10.17744/ mehc.37.1.v74514163rv73274

Chickering, A. W., & Reisser, L. (1993). *Education and Identity* 2nd ed. San Francisco, CA: Jossey-Bass.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. (2nd ed.) New York: Academic Press.

Cohen, J., Cohen P., West, S. G., & Aiken, L. S. (2002). *Applied multiple regression/correlation analysis for the behavioral sciences.* Mahwah, New Jersey: Lawrence Erlbaum Associates.

Conger, D., & Long, M. C. (2010). Why are men falling behind? Gender gaps in college performance and persistence. *The Annals of the American Academy of Political and Social Science, 627*, 184-214. Retrieved from https://www.jstor.org/stable/40607412

Connell, R. W., & Messerschmidt, J. W. (2005) Hegemonic masculinity: Rethinking the concept. *Gender Society, 19*(6), 829-859. doi: 10.1177/0891243205278639

Constantine, M. G., & Watt, S. K. (2002). Cultural congruity, womanist identity attitudes, and life satisfaction among African American college women attending historically black and predominantly white institutions. *Journal of College Student Development, 43*(2), 184-194. Retrieved from http://psycnet.apa.org/ psycinfo/2002-02165-003

Constantine, M. G., Hage, S. M., Kindaichi, M. M., & Bryant, R. M. (2007). Social justice and multicultural issues: Implications for the practice and training of counselors and counseling psychologists. *Journal of Counseling & Development, 85*(1), 24-29. doi: 10.1002/j.1556-6678.2007.tb00440.x

Constantine, M. G., Robinson, J. S., Wilton, L., & Caldwell, L. D. (2002). Collective self-esteem and perceived social support as predictors of cultural congruity among Black and Latino college students. *Journal of College Student Development, 43*(3), 307-316. Retrieved from https://eric.ed.gov/?id=EJ648442

Coughlin, J. (Producer), Silverman, G. (Director), & Dawson, F. (Co-Director). (2018, March 10). *TransMilitary* [Documentary]. United States: SideXSide Studios.

Currier, J. M., McDermott, R. C., & McDermott, W. H. (2017). Mental health treatment-related stigma and professional help seeking among student veterans. *Psychological Services, 14*(4), 531-542. doi: 10.1037/ser0000129

Daley, J. G. (1999). Understanding the military as an ethnic identity. In J. G. Daley (Ed.), *Social Work Practice in the Military* (pp. 291-303). Binghamton, NY: Hawthorn Press.

Danish, S. J., & Antonides, B. J. (2009). What Counseling Psychologists can do to help returning veterans. *The Counseling Psychologist, 37*(8), 1076-1089. doi: 10.1177/0011000009338303

Danish, S. J., & Forners, T. (2008). Promoting positive development and competency across the life span. A growing internationalization of Counseling Psychology. In S. D. Brown & R.

W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 500-516). New York: Wiley.

Davidson, C., & Wilson, K. (2013). Reassessing Tinto's concepts of social and academic integration in student retention. *Journal of College Student Retention, 15*(3), 329-346. doi: 10.2190/CS.15.3.b

Davino, C., Furno, M., & Vistocco, D. (2013). *Quantile regression: Theory and applications*. United Kingdom: John Wiley & Sons.

Department of Defense. (2017). *2017 demographics: Profile of the military community*. Retrieved from https://www.militaryonesource.mil/reports-and-surveys/demographic-profiles

Deployment. (2016). In *Military.com*. Retrieved from http://www.military.com/deployment/deployment-mobilization-overview.html

Deresiewicz, W. (2011, August 20). An empty regard. *The New York Times*. Retrieved from https://www.nytimes.com/2011/08/21/opinion/sunday/americas-sentimental-regard-for-the-military.html

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). *Journal of Personality Assessment, 49*(1), 71-75. doi: 10.1207/s15327752jpa4901_13

Diener, E. Oishi, S. & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. *Annual Review of Psychology, 54*(1), 403-425. doi: 10.1146/annurev.psych.54.101601.145056

DiRamio, D., & Jarvis, K. (2011). Veterans in higher education: When Johnny and Jane come marching to campus. *ASHE Higher Education Report, 37*(3), 1-144. doi:10.1002/aehe.3703

DiRamio, D., Ackerman, R., & Mitchell, R. L. (2008). From combat to campus: Voices of student-veterans. *NASPA Journal, 45*(1), 73-102. doi: 10.2202/1949-6605.1908

Eimers, M. T., & Pike, G. R. (1997). Minority and nonminority adjustment to college: Differences or similarities? *Research in Higher Education, 38*(1), 77-97. doi: 10.1023/A:1024900812863

Elliot, M., Gonzalez, C., & Larsen, B. (2011). U.S. military veterans transition to college: Combat, PTSD, and alienation on campus. *Journal of Student Affairs Research and Practice, 48*(3), 279-296. doi: 10.2202/1949-6605.6293

Estrada, A. X., & Weiss, D. J. (1999). Attitudes of military personnel toward homosexuals. *Journal of Homosexuality, 37*(4), 83-97. doi: 10.1300/J082v37n04 _05

Ethier, K, & Deaux, K. (1990). Hispanics in Ivy: Assessing identity and perceived threat. *Sex Roles, 22*(7/8), 427-440. doi: 10.1007/BF00288162

Field, A. P., & Field, A. P. (2018). *Discovering statistics using IBM SPSS statistics*. London: SAGE Publications.

Fischer, M. J. (2007). Settling into campus life: Differences by race/ethnicity in college involvement and outcomes. *The Journal of Higher Education, 78*(2), 125-156. doi: 10.1353/jhe.2007.0009

Fitzgerald, L. F., Magley, V. J., Drasgow, F., & Waldo, C. R. (1999). Measuring sexual harassment in the military: The sexual experiences questionnaire (SEQ-DoD). *Military Psychology, 11*(3), 243-263. doi: 10.1207/s15327876mp1103_3

Garica, J., & Gustavson, A. R. (1997, January 1). The science of self-report. *Observer, 10*(1). Retrieved from https://www.psychologicalscience.org/observer/the-science-of-self-report

Gates, G. J., & Herman, J. (2014). Transgender military service in the United States. *The Williams Institute: Other Recent Work.* Retrieved from https://escholarship.org/uc/item/1t24j53h

Gelso, C., Nutt Williams, 3., & Fretz, B. (2014). *Counseling psychology* (3rd ed.). Washington, DC: American Psychological Association.

GLAADa. (n.d.). *GLAAD media reference guide: Lesbian/gay/bisexual glossary of terms.* Retrieved from http://www.glaad.org/reference/lgbtq

GLAADb. (n.d.) *GLAAD media reference guide: Glossary of terms- Transgender.* Retrieved from https://www.glaad.org/reference/transgender

Gloria, A. M., & Ho, T. A. (2003). Environmental, social, and psychological experiences of Asian American undergraduates: Examining issues of academic persistence. *Journal of Counseling & Development, 81*(1), 93-105. doi: 10.1002/j.1556-6678.2003.tb00230.x

Gloria, A. M., & Robinson Kurpius, S. E. (1996). The validation of the cultural congruity scale and the university environment scale with Chicano/a students. *Hispanic Journal of Behavioral Sciences, 18(*4), 533-549. doi: 10.1177/ 07399863960184007

Gloria, A. M., & Robinson Kurpius, S. E. (2001). Influences of self-beliefs, social support, and comfort in the university environment on the academic nonpersistence decisions of American Indian undergraduates. *Cultural Diversity and Ethnic Minority Psychology, 7*(1), 88-102. doi: 10.1037//1099-9809.7.1.88

Gloria, A. M., Castellanos, J., Lopez, A. G., & Rosales, R. (2005). An examination of academic nonpersistence decisions of Latino undergraduates. *Hispanic Journal of Behavioral Sciences, 27*(2), 202-223. doi: 10.1177/0739986305275098

Gonzalez, C., & Elliot, M. (2013). *Student veterans speak up: A focus group study.* Reno, NV: University Veterans Coalition. Retrieved from http://www.unr.edu/Documents/president/uvc/021313-Focus-Group-Report.pdf

Goodman, J., Schlossberg, N. K., & Anderson, M. L. (2006) *Counseling adults in transition: Linking practice with theory* (3rd ed.). New York, NY: Springer.

Gordon, J. E. (2010). Protected class status and veterans. In C. Hopkins, D. Herrmann, R. B. Wilson, B. Allen, & L. Malley (Eds.), *Improving college education of veterans* (pp. 97-110). Washington, DC: Create Space Independent Publishing Platform.

Goree, C. T., & Marszalek, J. F. (1995). Electronic surveys: Ethical issues for researchers. *Journal of College Student Affairs, 15*(1), 75–79. Retrieved from https://eric.ed.gov/?id=EJ515787

Greathouse, M., BrckaLorenz, A., Hoban, M., Huesman, R., Rankin, S., Bra Stolzenberg, E. (2018). *Queer-spectrum and trans-spectrum student experiences in American higher education: The analyses of national survey findings*. Rutgers Tyler Clementi Center. New Brunswick, New Jersey. Retrieved from https://clementicenter.rutgers.edu/news/2018-white-paper/.

Green Zone Training. (2019, April 30). Retrieved from https://www.purdue.edu/veterans/resources/greenzonetraining.php.

Halvorson, A. (2010). *Understanding the military: The institution, the culture, and the people* [White paper]. Retrieved from https://www.samhsa.gov/sites/default/files/military_white_paper_final.pdf

Hanafin, B. (2011, August 31). A clash of cultures: Veterans and non-veterans. *Veterans Today.* Retrieved from http://www.veteranstoday.com/2011/08/31/a-clash-of-cultures-veterans-and-non-veterans/

Harvey, J. H. (2001). The psychology of loss as a lens to a positive psychology. *American Behavioral Scientist, 44*(5), 838-853. doi: 10.1177/0002764201044005009

Harvey, J. H., & Miller, E. (1998). Toward a psychology of loss. *Psychological Science, 9*(6), 429-434. doi: 10.1111/1467-9280.00081

Harvey, J. H., & Weber, A. L. (1998). Why there must be a psychology of loss. In J. H. Harvey (Ed.), *Perspectives on Loss: A Sourcebook* (pp. 319-330). New York: Brunner/Mazel.

Heath, K. (2010). Do you hear my silence: Listening to the untold stories of military students. In C. Hopkins, D. Herrmann, R. B. Wilson, B. Allen, & L. Malley (Eds.), *Improving college education of veterans* (pp. 19-28). Washington, DC: Create Space Independent Publishing Platform.

Heppner, P. P., Leong, F. T. L., & Chao, H. (2008) A growing internationalization of Counseling Psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 68-85). New York: Wiley.

Hijonosa, R. (2010). Doing hegemony: Military, men, and constructing a hegemonic masculinity. *The Journal of Men's Studies, 18*(2), 179-194. doi: 10.3149/jms.1802.179

Holley, L. C., Larson, N. C., Adelman, M., & Treviño, J. (2008). Attitudes among university undergraduates toward LGB and five ethnic/racial groups. *Journal of LGBT Youth, 5*(1), 79-101. doi: 10.1300/J524v05n01_07

Huerta, M., Cortina, L. M., Pang, J. S., Torges, C. M., & Magley, V. J. (2006). Sex and power in the academy: Modeling sexual harassment in the lives of college women. *Personality and Social Psychology Bulletin, 32*(5), 616-628. doi: 10.1177/0146167205284281

Hughes, B. E. (2018, March). Coming out in STEM: Factors affecting retention of sexual minority STEM students. *Sciences Advances, 4*(3). Retrieved from http://advances. sciencemag.org/cgi/content/full/4/3/eaao6373/DC1

Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education, 70*(4), 324-345. Retrieved from http://www.jstor.org/stable/ 2673270

IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.

Jacobs, J. A. (1996). Gender inequality and higher education. *Annual Review of Sociology, 22*, 153-185. Retrieved from http://www.jstor.org/stable/2083428

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The Report of the 2015 U.S. Transgender Survey*. Washington, DC: National Center for Transgender Equality. Retrieved from https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF

Kemp-Blackmon, V. (1999). *Perceived discrimination of African-American military personnel based in Hawaii: Life experiences and the implications for self esteem* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3013746).

Kim, Y. M., & Cole, J. S. (2013). *Student veterans/service members' engagement in college and university life and education.* Washington, DC: American Council on Education. Retrieved from http://www.acenet.edu/news-room/Documents/Student -Veterans-Service-Members-Engagement.pdf

Kuh, G. D., & Whitt, E. J. (1988). *The invisible tapestry. Culture in American colleges and universities*. (ASHE-ERIC Higher Education Report No. 1, 1988). Washington, DC: Association for the Study of Higher Education.

Langhout, R. D., Drake, P., & Rosselli, F. (2009). Classism in the university setting: Examining student antecedents and outcomes. *Journal of Diversity in Higher Education, 2*(3), 166-181. doi: 10.1037/a0016209

Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychological adjustment. *Journal of Counseling Psychology, 51*(4), 482-509. doi: 10.1037/0022-0167.51.4.482

Little, W. (2014). Chapter 3: Culture. In W. Little, & R. McGivern (Eds.), *Introduction to Sociology – 1st Canadian Edition*. Houston, TX: OpenStax. Retrieved from https://opentextbc.ca/introductiontosociology/

Livingston, W. G., Havice, P. A., Cawthon, T. W., & Fleming, D. S. (2011). Coming home: Student veterans' articulation of college re-enrollment. *Journal of Student Affairs Research and Practice, 48*(3), 315-331. doi: 10.2202/1949-6605.6292

Logan, K.T. (2014, May 16). This bad habit is hurting our female veterans. *Task & Purpose*. Retrieved from http://taskandpurpose.com/bad-habit-hurting-female-veterans/

Louis, V. V., & Zhao, S. (2002). Effects of family structure, family SES, and adulthood experiences on life satisfaction. *Journal of Family Issues, 23*(8), 986-1005. doi: 10.1177/019251302237300

Lutz, A. (2008). Who joins the military? A look a race, class, and immigration status. *Journal of Political and Military Sociology, 36*(2), 167-188. Retrieved from http://surface.syr.edu/soc/3/

Manning, K. (2000). *Rituals, ceremonies, and cultural meaning in higher education.* Westport,
Military Friendly. (2017). Retrieved from http://militaryfriendly.com/

Miller, K. A., & Servaty-Seib, H. L. (2016). First-year students' loss experiences and institutional belongingness in the transition to college. *Journal of The First-Year Experience & Students in Transition, 28*(2), 53-72. Retrieved from http://www.ingentaconnect.com/contentone/fyesit/fyesit/2016/00000028/00000002/art00003

Miller, K., & Cray, A. (2013, September 20). The battles that remain: Military service and LGBT equality. *Center for American Progress*. Retrieved from https://www.americanprogress.org/issues/lgbt/reports/2013/09/20/74883/the-battles-that-remain-military-service-and-lgbt-equality/

Mobilization. (2016). In *Military.com*. Retrieved from http://www.military.com/deployment/deployment-mobilization-overview.html

Morral, A. R., Gore, K., Schell, T., Bicksler, B., Farris, C., Ghosh Dastidar, M., Jaycox, L. H., Kilpatrick, D., Kistler, S., Street, A., Tanielian, T., & Williams, K. M. (2015). *Sexual assault and sexual harassment in the U.S. military: Highlights from the 2014 RAND*

*military workplace study* (RB-9841-OSD). Retrieved from RAND website: http://www.rand.org/pubs/research_briefs/RB9841.html.

Morris, M. (1996). By force of arms: Rape, war, and military culture. *Duke Law Journal, 45*(4), 651-781. Retrieved from http://www.jstor.org/stable/1372997

Motulsky, S. L., Gere, S. H., Saleem, R., & Trantham, S. M. (2014). Teaching social justice in Counseling Psychology. *The Counseling Psychologists, 42*(8), 1058-1083. doi: 10.1177/0011000014553855

Murdoch, M., & Nichol, K. L. (1995). Women veterans' experiences with domestic violence and with sexual harassment while in the military. *Archives of Family Medicine, 4*(5), 411-418. doi: 10.1001/archfami.4.5.411

Naphan, D., & Elliot, M. (2015). Role exit from the military: Student veterans' perceptions of transitioning from the U.S. military to higher education. *The Qualitative Report, 20*(2), 36-48. Retrieved from http://www.nova.edu /ssss/QR/QR20/2/naphan3.pdf

National Partnership for Women & Families. (2016). *Quantifying America's gender gap among key groups*. Retrieved http://www.nationalpartnership.org/research-library/workplace-fairness/fair-pay/quantifying-americas-gender-wage-gap.pdf

NCES. (n.d.). *Nontraditional undergraduates/Definitions and data*. Retrieved from https://nces.ed.gov/pubs/web/97578e.asp

NCES. (2014). *Enrollment, staff, and degrees/certificates conferred in degree-granting and non-degree-granting postsecondary institutions, by control and level of institution, sex of student, type of staff, and level of degree: Fall 2013 and 2012-13*. Retrieved from https://nces.ed.gov/programs/digest/d14/tables/ dt14_301.10.asp

Nguyen, H-H. D., & Ryan, A. M. (2008). Does stereotype threat affect test performance of minorities and women? A meta-analysis of experimental evidence. *Journal of Applied Psychology, 93*(6), 1314-1334. doi: 10.1037/a0012702

Nora, A., & Cabrera, A. C. (1996). The role of perceptions of prejudice and discrimination on the adjustment of minority students to college. *Journal of Higher Education, 67*(2), 119-148. doi: 10.2307/2943977

Nora, A., Cabrera, A., Serra Hagedorn, L., & Pascarella, E. (1996). Differential impacts of academic and social experiences on college-related behavioral outcomes across different ethnic and gender groups at four-year institutions. *Research in Higher Education, 37*(4), 427-451. doi:10.1007/BF01730109

Noy, C. (2008). Sampling knowledge: The hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology, 11*(4), 327-344. Retrieved from http://nbn-resolving.de/urn:nbn:de:0168-ssoar-53861

O'Brien, C., Keith, J., & Shoemaker, L. (2015). Don't tell: Military culture and male rape. *Psychological Services, 14*(4), 357-365. doi: 10.1037/ser0000049

Olson, G. A. (2009, July 23). Exactly what is 'shared governance'? *The Chronicle of Higher Education.* Retrieved from http://www.chronicle.com/article/Exactly-What-Is-Shared/47065

Osborne, J. (2002). Notes on the use of data transformations. *Practical Assessment, Research & Evaluation, 8*(6). Retrieved from http://pareonline.net/getvn.asp? v=8&n=6

Osborne, N. (2013). Veteran ally: Practical strategies for closing the military-civilian gap on campus. *Innovative Higher Education, 39*(3), 247-260. doi: 10.1007/s10755-013-9274-z

Owens, J. (2016). Early childhood behavior problems and the gender gap in educational attainment in the United States. *Sociology of Education, 89*(3), 236-258. doi: 10.1177/0038040716650926

Parent, M. C., DeBlaere, C., & Moradi, B. (2013). Approaches to research on intersectionality: Perspectives on gender, LGBT, and racial/ethnic identities. *Sex Roles, 68*(11), 639-645. doi: 10.1007/s11199-013-0283-2

Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *The Journal of Higher Education, 51*(1), 60-75. Retrieved from http://www.jstor.org/stable/1981125

Pascarella, E. T., & Terenzini, P. T. (2005) *How college affects students: A third decade of research*. San Francisco, CA: Jossey-Bass.

Patterson, T. (2016, November 11). Get ready for more U.S. women in combat. *CNN*. Retrieved from http://www.cnn.com/2016/11/10/us/women-combat-us-military/

Peart-Forbes, S. G. A. (2004). *Persistence of African American college students: social support and university climate* (Doctoral dissertation). Indiana University of Pennsylvania. Retrieved from Proquest Dissertations and Theses database. (UMI No. 3137069).

Pedersen, P. B. (1991). Multiculturalism as a generic approach to counseling. *Journal of Counseling and Development, 70*(1), 6-12. doi: 10.1002/j.1556-6676.1991. tb01555.x

Pellerin, C. (2015, June 9). DoD updates equal opportunity policy to include sexual orientation. *U.S. Department of Defense News.* Retrieved from https://www.defense.gov /News/Article/Article/604797

Peralta, E. (2013, January 23). *Panetta is lifting ban on women in combat roles. NPR*. Retrieved from http://www.npr.org/sections/thetwo-way/2013/01 /23/170093351 /panetta-is-lifting-ban-on-women-in-combat-roles

Peterson, D. B., & Elliot, T. R. (2008). Advances in conceptualizing and studying disability. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 212-230). New York: Wiley.

Pierce, C. A., Block, R. A., & Aquinis, H. (2004). Cautionary note on reporting eta-squared values from multifactorial ANOVA designs. *Educational and Psychological Measurement 64*(6), 916- 924. doi: 10.1177/0013164404264848

Radford, W. A., & Wun, J. (2009). *Issue tables: A profile of military servicemembers and veterans enrolled in postsecondary education in 2007-2008* (NCES 2009-182). Washington, DC: National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009182

Rankin, S. (2006). LGBTQA students on campus: Is higher education making the grade? *The Journal of Gay & Lesbian Issues in Education, 3*(2/3), 111-117. doi: 10.1300/ J367v03n02_11

Raybeck, D. (2010). A clash of cultures: Veterans in academe. In C. Hopkins, D. Herrmann, R. B. Wilson, B. Allen, & L. Malley (Eds.), *Improving college education of veterans* (pp. 179-195). Washington, DC: Create Space Independent Publishing Platform.

Riede, F. (2011). Steps towards operationalizing an evolutionary archaeological definition of culture. In B. W. Roberts & M. Vander Linden (Eds.), *Investigating Archaeological Cultures: Material Culture, Variability, and Transmission* (pp. 245-270). New York: Springer Verlag.

Ross, T., Kena, G., Rathbun, A., KewalRamani, A., Zhang, J., Kristapovich, P., & Manning, E. (2012). *Higher education: Gaps in access and persistence study* (NCES 2012-046). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved from https://nces.ed.gov/Pubsearch/pubsinfo.asp?pubid=2012046

Rumann, C. B., & Hamrick, F. A. (2010) Student veterans in transition: Re-enrolling after war zone deployments. *The Journal of Higher Education, 81*(4), 43-457. doi:10.1353/jhe. 0.0103

Sadler, A. G., Booth, B. M., Nielson, D., & Doebbeling, B. N. (2000). Health-related consequences of physical and sexual violence: Women in the military. *Obstetrics & Gynecology, 96*(3), 473-480. doi: 10.1016/S0029-7844(00)00919-4

Sax, L. J., Bryant, A. N., & Harper, C. E. (2005). The differential effects of student-faculty interaction on college outcomes for women and men. *Journal of College Student Development, 46*(6), 642-657. doi: 10.1353/csd.2005.0067

Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist, 9*(2), 2-18. doi:10.1177/001100008100900202

Sellers, R. M., Rowley, S. A. J., Chavous, T. M., Shelton, N., & Smith, M. A. (1997). Multidimensional inventory of Black identity: A preliminary investigation of reliability and construct validity. *Journal of Personality and Social Psychology, 73*(4), 805-815. doi: 10.1037/0022-3514.73.4.805

Servaty-Seib, H. L. (2014). Using a gain/loss framework to measure impact: The perceived impact of life event scale. *Journal of Loss and Trauma: International Perspectives on Stress & Coping, 19*(4), 331-354. doi: 10.1080/15325024.2013.781468

Sheu, H-B., Mejia, A., Rigali-Oiler, M., & Primé, D. R. (2016). Social cognitive predictors of academic and life satisfaction: Measurement and structural equivalence across three racial/ethnic groups. *Journal of Counseling Psychology, 63*(4), 460-474. doi: 10.1037/cou0000158

Shields, S. A. (2008). Gender: An intersectionality perspective. *Sex Roles, 59*(5), 301-311. doi: 10.1007/s11199-008-9501-8

Sinozich, S., & Langton, L. (2014). *Rape and sexual assault victimization among college-age females, 1995-2013* (Special Report NCJ 248471). Washington, DC: Office of Justice Programs Bureau of Justice Statistics. Retrieved from https://www.bjs.gov/content /pub/pdf/ rsavcaf9513.pdf

Smith, W. A., Allen, W. R., & Danley, L. L. (2007). "Assume the position…you fit the description": Psychological experiences and racial battle fatigue among African American male college students. *American Behavioral Scientist, 51*(4), 551-578. doi: 10.1177/0002764207307742

Snider, D. M. (1999). An uninformed debate on military culture. *Orbis, 43*(1), 11-26. doi: 10.1016/S0030-4387(99)80054-4

Soeters, J. L., Winslow, D. J., & Weibull, A. (2006). Military culture. In G. Caforio (Ed.), *Handbook of the sociology of the military* (pp. 237-254). New York, NY: Springer Science + Business Media, LLC.

Somers, P., Woodhouse, S., & Coffer, J. (2004). Pushing the boulder uphill: The persistence of first-generation college students. *NASPA Journal, 41*(3), 418-435. Retrieved fromhttp://depts.washington.edu/apac/roundtable/3-4-09_pushing_the_boulder_ uphill.pdf3-4-09_pushing_the_boulder_uphill.pdf

Speight, S. L., & Vera, E. M. (2008). Social justice and Counseling Psychology: A challenge to the profession. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (4th ed., pp. 54-67). New York: Wiley.

Sponsler, B. A., Wesaw, A. J., & Jarrat, D. (2013). *Measuring the success of student veterans and active duty military students* [Special Report]. Retrieved from NASPA Student

Affairs Administrators in Higher Education website: https://www.naspa.org/rpi/reports/measuring-the-success-of-student-veterans-and-active-duty-military

Sporn, B. (1996). Managing university culture: An analysis of the relationship between institutional culture and management approaches. *Higher Education, 32*(1), 41-61. Retrieved from http://www.jstor.org/stable/3447895

Steenbarger, B. N. (1990). Toward a developmental understanding of the counseling specialty: Lessons from our students. *Journal of Counseling & Development, 68*(4), 434-437. doi: 10.1002/j.1556-6676.1990.tb02524.x

Stronge, S., Sengupta, N. K., Barlow, F. K., Osborne, D., Houkamau, C. A., & Sibley, C. G. (2015). Perceived discrimination predicts increased support for political rights and life satisfaction mediated by ethnic identity: A longitudinal analysis. *Cultural Diversity and Ethnic Minority Psychology, 22*(3), 359-368. doi: 10.1037/ cdp0000074

Sun, K. (2010, March 9). How the use of "White vs. nonwhite" contaminates (not merely) criminological research. *Psychology Today*. Retrieved from https://www.psychologytoday.com/us/blog/the-justice-and-responsibility-league/201003/how-the-use-white-vs-nonwhite-contaminates-not

Swim, J. K. (2003). African American college students' experiences with everyday racism: Characteristics of and response to these incidents. *The Journal of Black Psychology, 29*(1), 38-67. Retrieved from http://journals.sagepub.com/doi/abs/10.1177/0095798402239228

Tabachnick, B.G, & Fidell, L.S. (2013). *Using Multivariate Statistics*, 6th ed. Sadler River, NJ: Pearson Education, Inc.

Tan, M. (2015, March 18). Army investigates alleged 'Racial Thursdays' at unit. *ArmyTimes.* Retrieved from https://www.armytimes.com/story/military/careers/army/2015/03/18/army-race-investigation-unit/24994093/

Taylor, E. B. (1920). *Primitive culture: Research into the development of mythology, philosophy, religion, language, art, and custom.* London, UK: Murray. Retrieved from https://archive.org/details/primitiveculture01tylouoft

Tierney, W. G. (1988). Organizational culture of higher education: Defining the essential. *The Journal of Higher Education, 59*(1), 2-21. Retrieved from http://www.jstor.org/stable/1981868

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research. 45*(1), 89-125. Retrieved from http://www.jstor.org/discover/10.2307/1170024?uid=3739936&uid=2&uid=4&uid=3739256&sid=21104557879611

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago, IL: University of Chicago Press.

U.S. Census Bureau. (2015). *FFF: Veteran's Day 2015: Nov. 11, 2015* (Release No. CB15-FF.23). Retrieved from https://www.census.gov/newsroom/facts-for-features/2015/cb15-ff23.html

U.S. Census Bureau. (2018). *Population estimates, July 1, 2018.* Retrieved from https://www.census.gov/quickfacts/fact/table/US#

U.S. Department of Education. (2016). *After the Post-9/11 GI Bill: Military service members and veterans enrolled in undergraduate and graduate education* (NCES 2016-435). Retrieved from https://nces.ed.gov/pubs2016/2016435.pdf

U.S. Department of Veterans Affairs. (2016). *Profile of women veterans: 2015.* Retrieved from https://www.va.gov/vetdata/report.asp

U.S. Department of Veterans Affairs. (2017). *M21-1, part III, subpart ii, chapter 6, section A: Establishing veteran status.* Retrieved from https://www.knowva.ebenefits.va.gov/system/templates/selfservice/va_ss/#1a

U.S. Department of Veterans Affairs. (2019, May 3). *Budget in brief.* Retrieved from https://www.va.gov/budget/products.asp.

Vacchi, D. T. (2012). Considering student veterans on the twenty-first-century college campus. *About Campus, 17*(2), 15-21. doi: 10.1002/abc.21075

Vacchi, D. T., & Berger, J. B. (2014). Student veterans in higher education. In M.B. Paulsen (Ed.), *Higher Education: Handbook of Theory and Research* (Vol. 29, pp. 93-151). New York, NY: Springer Science+Business Media Dordrecht. doi: 10.1007/978-94-017-8005-6_3

Van Dusen, R. L. (2011). *A quantitative study of student veterans' intent to persist* (Doctoral Dissertation). Texas Tech University, Texas. Retrieved from Texas Tech University Libraries Electronic Theses and Dissertations, http://hdl.handle.net/2346/ETD-TTU-2011-05-1318

Verkuyten, M. (2008). Life satisfaction among ethnic minorities: The role of discrimination and group identification. *Social Indicators Research, 89*(3), 391-404. Retrieved from http://www.jstor.org/stable/27734752

Walsh, K. J., & Robinson Kurpius, S. E. (2015). Parental, residential, and self-belief factors influencing academic persistence decisions of college freshman. *Journal of College Student Retention: Research, Theory, & Practice, 0*(0), 1-19. doi: 10.1177/1521025115579672

Wapole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. *The Review of Higher Education, 27*(1), 45-73. doi: 10.1353/rhe.2003.0044.

Weber, D. J. (2012). *Academic success and well-being following OEF/OIF deployment* (Doctoral dissertation). Arizona State University, Arizona. Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3495315).

Weitz, R. (2015). Vulnerable warriors: Military women, military culture, and fear of rape. *Gender Issues, 32,* 164-183. doi: 10.1007/s12147-015-9137-2

Wang, L., Elder Jr., G. H., Spence, N. J. (2012). Status configurations, military service and higher education. *Social Forces, 91*(2), 397-422. doi: 10.1093/sf/sos174

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender and Society, 1*(2), 125-151. Retrieved from http://links.jstor.org/sici?sici=08912432%28198706%291%3A2%3C125%3ADG %3E2.0.CO%3B2-W.

Windmeyer, S. (2016, April 15). The path forward: LGBT retention and academic success. *Insight into Diversity*. Retrieved from https://www.insightintodiversity.com/the-path-forward-lgbt-retention-and-academic-success/

Yoon, E., Stiller Funk, R., & Kropf, N. P. (2010). Sexual harassment experiences and their psychological correlates among a diverse sample of college women. *Journal of Women and Social Work, 25*(1), 8-18. doi: 10.1177/0886109909354979

# APPENDIX A. DEMOGRAPHIC SHEET

1. How did you hear about this questionnaire?
   ___Institutional email
   ___Friend/Military colleague
   ___Social media: (Please indicate the site_____)
   ___Other: (Please name_____)
   ___Amazon MTurk

2. Age: _____

3. Gender:
   ___Man
   ___Woman
   ___Transgender
   ___Choose not to answer
   ___Self-defined; (Please specify:_____)

4. Race/Ethnicity:
   ___ African American/Black
   ___ American Indian or Alaskan Native
   ___ Anglo American/White (not of Hispanic origin)
   ___ Asian American
   ___ Hispanic or Latino/a American
   ___ Native Hawaiian or Other Pacific Islander
   ___ Middle Eastern American
   ___ Biracial/Multiracial (Please specify: _____)
   ___ Self-defined: (Please specify: _____)

5. Sexual Orientation:
   ___ Bisexual (i.e., you identify as someone who experiences sexual, romantic, and/or physical attraction to people of your own gender and your opposite gender)
   ___ Gay or Lesbian (i.e., you identify as someone who experiences sexual, romantic, and/or physical attraction to people of your same gender)
   ___ Heterosexual (i.e., you identify as someone who experiences sexual, romantic, and/or physical attraction to people of your opposite gender)
   ___ Questioning (i.e., you are exploring your sexual orientation identity)
   ___ Self-defined (i.e., none of the categories above adequately captures your sexual orientation identity) (Please specify: _____)

6. Relationship Status:
   ___Single
   ___Married
   ___Partnered

___Separated
___Divorced
___Widowed
___Self-defined: (Please specify: _____)

7. Please use the slider to indicate where you think your family stands, at this point, relative to other people in your county. The far right of the slider are the people who are the best off- those who have the most money, the most money, the most education, and the most respected jobs. The far left of the slider, are the people whole are the worst off- who have the least money, the least education, and the least respected jobs or no jobs. The higher this slider the closer you are to the families at the very top.

   0 10 20 30 40 50 60 70 80 90 100

8. Do you attend a 2-year or 4-year institution?
   ___2-year
   ___4-year

9. What institution do you currently attend? If there are multiple campuses, please list your location. For example, "Ivy Tech- Bloomington."

10. Current Enrollment Status:
    ___Full-time student
    ___Part-time student

11. Current Year in School:
    ___First-year Undergraduate
    ___Sophomore Undergraduate
    ___Junior Undergraduate
    ___Senior Undergraduate
    ___Master's Level
    ___Doctoral Level

12. Including your current institution, how many institutions have you attended?

13. How many higher education credits have you completed?

14. How many semesters of higher education have you completed at any institutions? (Please answer with whole numbers the last full semester you completed. Full fall and spring semesters, not including summer or winter sessions. If your institution was on a trimester system, please indicate below.)
    ___1
    ___2
    ___3
    ___4
    ___5

___6
___7
___8
___9
___10 or more
___This number indicates the number of trimesters complete.

15. In what branch of the military did you or are you serving?
___Air Force
___Army
___Coast Guard
___Marine Corps
___Navy

16. Please select the most accurate description of your current service.
    a. Veteran (led to question 20 after 17)
    b. National Guard (led to question 18 after 17)
    c. Reserves (led to question 18 after 17)
    d. Full-time active duty (led to question 18 after 17)

17. How long did you serve or have you been serving in the military? (Please respond in years and months)

18. Have you been mobilized in the last 12 months?
___Yes
___No

19. Have you been deployed in last 12 months?
___Yes
___No

20. Have you spent time in a combat zone?
___Yes (go to question 21)
___No

21. When was your most recent combat exposure? Please respond in years and months. For example, if you last served in a combat zone 7 months ago, you would indicate 0 years, 7 months. If the last time you served in a combat zone was 5 years and 7 months ago, you would indicate 5 years, 7 months.

22. Were you injured due to your service?
___Yes
___No

23. Are you receiving medical or disability benefits for service related injuries?
___Yes

___No

24. Are you receiving medical benefits for mental health issues related to your service?
___Yes
___No

# APPENDIX B. MILITARY CENTRALITY SCALE

Adapted from Sellers et al. (1997)

Please indicate how much you agree or disagree with the following statements.

| | **Disagree Strongly** | | | **Neutral/Mixed** | | | **Agree Strongly** |
|---|---|---|---|---|---|---|---|
| 1. Overall, being a service member has very little to do with how I feel about myself. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. In general, being a service member is an important part of my self-image. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. My destiny is tied to the destiny of other service members. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Being a service member is unimportant to my sense of what kind of person I am. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I have a strong sense of belonging to service members. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I have a strong attachment to service members. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Being a service member is an important reflection of who I am. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Being a service member is not a major factor in my social relationships. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# APPENDIX C. PERCEPTIONS OF PREJUDICE AND DISCRIMINATION SCALE

Adapted from Cabrera and Nora (1994)

For each of the following items, indicate the extent to which you have experienced the feeling or situation at school based on your veteran or military identity.

| | **Strongly disagree** | | | | **Strongly agree** |
|---|---|---|---|---|---|
| 1. I have observed discriminatory words, behaviors, or gestures directed at military or veteran students at this institution. | 1 | 2 | 3 | 4 | 5 |
| 2. I feel there is a general atmosphere of prejudice among students. | 1 | 2 | 3 | 4 | 5 |
| 3. I have encountered prejudice based on my military or veteran status while attending this institution | 1 | 2 | 3 | 4 | 5 |
| 4. I have heard negative words about military and veteran people while attending classes. | 1 | 2 | 3 | 4 | 5 |
| 5. I feel there is a general atmosphere of prejudice among faculty at this institution. | 1 | 2 | 3 | 4 | 5 |
| 6. I feel there is a general atmosphere of prejudice among academic staff at this institution. | 1 | 2 | 3 | 4 | 5 |
| 7. I have been discouraged from participating in class discussions. | 1 | 2 | 3 | 4 | 5 |
| 8. I have been singled out in class and treated differently than other students. | 1 | 2 | 3 | 4 | 5 |

# APPENDIX D. CULTURAL CONGRUITY SCALE-MILITARY

Weber (2012) adapted from Gloria and Robinson Kurpius (1996)

For each of the following items, indicate the extent to which you have experienced the feeling or situation at school.

| | **Not at all** | | | | | | **A great deal** |
|---|---|---|---|---|---|---|---|
| 9. I feel that I have to change myself to fit in at school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I try not to show the parts of me that are "military based." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. I often feel like a chameleon, having to change myself depending on the military history of the person I am with at school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I feel that my military background is incompatible with other students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. I can talk to my peers at school about my military experiences. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I feel I am leaving my military values behind by going to college. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. My military values are in conflict with what is expected at school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. I feel that my language and/or appearance make it hard for me to fit in with other students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. My military and school values often conflict. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. I feel accepted at school as a veteran or service member. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. As a service member or veteran, I feel as if I belong on this campus. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# APPENDIX E. PERCEIVED IMPACT OF LIFE EVENT SCALE

Adapted from Miller and Servaty-Seib (2015) & Servaty-Seib (2014)

For each area, please use the follow scale and circle the current level of loss or gain that you attribute to being in college.

**1** = extreme loss
**2** = moderate loss
**3** = slight loss
**4** = no change
**5** = slight gain
**6** = moderate gain
**7** = extreme gain

For example, if you currently attribute a moderate level of gain in the quality of friendships to this life event, please circle 6.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. Quality of friendships | 1 | 2 | 3 | 4 | 5 | (6) | 7 |

| | **Extreme Loss** | **Moderate Loss** | **Slight Loss** | **No Change** | **Slight Gain** | **Moderate Gain** | **Extreme Gain** |
|---|---|---|---|---|---|---|---|
| 1. Current employment position | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Quantity of friendships | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Self-esteem | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Access to employment opportunities | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Current career | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Quality of friendships | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Sense of belonging | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Material possessions | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | Extreme Loss | Moderate Loss | Slight Loss | No Change | Slight Gain | Moderate Gain | Extreme Gain |
|---|---|---|---|---|---|---|---|
| 9. Role as a productive member of society | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Time spent with friends | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Definition/view of self | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Hope | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Financial security | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Control over life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Purpose in life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Income | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. Ability to think clearly | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Marital/relationship situation | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. Control over the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. Meaning in life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. Sexual functioning | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. Educational achievement | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. Quality of romantic relationships | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. Appreciation for life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. Sexual desire | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. Time spent with romantic partner(s) | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. Sexual pleasure | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| | Extreme Loss | Moderate Loss | Slight Loss | No Change | Slight Gain | Moderate Gain | Extreme Gain |
|---|---|---|---|---|---|---|---|
| 28. Ability to interact socially | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. Expectations about the future | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. Size of support network | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. Personal values | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. Energy | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. Happiness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. Life satisfaction | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. Emotional maturity | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. Trust | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37. Level of social acceptance from others | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38. Will to live | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39. Wholeness | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Overall, do you consider being in college to be a __desirable or __undesirable experience?

**Please check only one.**

# APPENDIX F. THE SATISFACTION WITH LIFE SCALE (SWLS)

Diener, Emmons, Larsen, and Griffin (1985)

For each of the following items, indicate the extent to which you agree with each statement.

| | **Strongly disagree** | **Disagree** | **Slightly disagree** | **Neither agree or disagree** | **Slightly agree** | **Agree** | **Strongly agree** |
|---|---|---|---|---|---|---|---|
| 1. In most ways my life is ideal. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. The conditions of my life are excellent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. I am satisfied with my life | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. So far I have gotten the important things I want in life. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. If I could live my life over, I would change almost nothing. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

# APPENDIX G. PERSISTENCE/VOLUNTARY DROPOUT DECISION SCALE

Pascarella and Terenzini (1980)

Please indicate to what extent you agree with each statement.

| | Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 1. Since coming to this university I have developed close personal relationships with other students. | 1 | 2 | 3 | 4 | 5 |
| 2. The student friendships I have developed at this university have been personally satisfying. | 1 | 2 | 3 | 4 | 5 |
| 3. My interpersonal relationships with other students have had a positive influence on my personal growth, attitudes, and values. | 1 | 2 | 3 | 4 | 5 |
| 4. My interpersonal relationships with other students have had a positive influence on my intellectual growth and interests in ideas. | 1 | 2 | 3 | 4 | 5 |
| 5. It has been difficult for me to meet and make friends with other students. | 1 | 2 | 3 | 4 | 5 |
| 6. Few of the students I know would be willing to listen to me and help me if I had personal problem. | 1 | 2 | 3 | 4 | 5 |
| 7. Most students at this university have values and attitudes different from mine. | 1 | 2 | 3 | 4 | 5 |
| 8. My classroom interactions with faculty have had a positive influence on my personal growth, values, and attitudes. | 1 | 2 | 3 | 4 | 5 |
| 9. My non-classroom interactions with faculty have had a positive influence on my intellectual growth and interest in ideas. | 1 | 2 | 3 | 4 | 5 |
| 10. My non-classroom interactions with faculty have had a positive influence on my career goals and aspirations. | 1 | 2 | 3 | 4 | 5 |
| 11 .Since coming to this university I have developed a close, personal relationship with at least one faculty member. | 1 | 2 | 3 | 4 | 5 |
| 12. I am satisfied with the opportunities to interact informally with faculty. | 1 | 2 | 3 | 4 | 5 |

| | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
|---|---|---|---|---|---|
| 13. Few of the faculty members I have had contact with are generally interested in students. | 1 | 2 | 3 | 4 | 5 |
| 14. Few of the faculty members I have had contact with are generally outstanding or superior teachers. | 1 | 2 | 3 | 4 | 5 |
| 15. Few of the faculty members I have had contact with are willing to spend time outside of class to discuss issues of interest and importance to students. | 1 | 2 | 3 | 4 | 5 |
| 16. Most of the faculty I have had contact with are interested in helping students grow in more than just academic areas. | 1 | 2 | 3 | 4 | 5 |
| 17. Most faculty members I have had contact with are genuinely Interested in teaching. | 1 | 2 | 3 | 4 | 5 |
| 18. I am satisfied with the extent of my intellectual development Since enrolling in the university. | 1 | 2 | 3 | 4 | 5 |
| 19.My academic experience has had a positive influence on my intellectual growth and interests in ideas. | 1 | 2 | 3 | 4 | 5 |
| 20. I am satisfied with my academic experiences at this university. | 1 | 2 | 3 | 4 | 5 |
| 21 .Few of my courses this year have been intellectually stimulating. | 1 | 2 | 3 | 4 | 5 |
| 22. My interest in ideas and intellectual matters has increased since coming to this university. | 1 | 2 | 3 | 4 | 5 |
| 23. I am more likely to attend a cultural event (for example, a concert, lecture, or art show) now than I was before coming to this university. | 1 | 2 | 3 | 4 | 5 |
| 24. I have performed academically as well as I anticipated I would. | 1 | 2 | 3 | 4 | 5 |
| 25. It is important for me to graduate from college. | 1 | 2 | 3 | 4 | 5 |
| 26. I am confident that I made the right decision in choosing to attend this university. | 1 | 2 | 3 | 4 | 5 |
| 27. It is likely that I will register at this university next fall. | 1 | 2 | 3 | 4 | 5 |
| 28. It is not important to me to graduate from this university. | 1 | 2 | 3 | 4 | 5 |
| 29. I have no idea at all what I want to major in. | 1 | 2 | 3 | 4 | 5 |
| 30. Getting good grades is not important to me. | 1 | 2 | 3 | 4 | 5 |

# APPENDIX H. VETERAN AND MILITARY-CONNECTED STUDENT CONTACTS AT PARTICIPATING INSTITUTIONS

| School | Contact Name | Title | Email | IRB Decision |
|---|---|---|---|---|
| Arizona State University | Steven Borden | Director, Pat Tillman Veterans Center | saborden@asu.edu | Approved |
| Indiana University | John Summerlot | Director, Veterans Support Services | jopsumme@iu.edu | Approved |
| Michigan State University | Nicole Rovig | University Registrar | rovig@msu.edu | Approved |
| Ohio State University | Mike Carrell | Assistant Vice Provost & Director, Office of Military & Veterans Services | carrell.8@osu.edu | Approved |
| Pennsylvania State University | Brian Clark | Director, Office of Veterans Programs | bcc1@psu.edu | Approved |
| Purdue University | Jamie Richards | Sr. Asst. Director & Coordinator of Military, Veteran and Nontraditional Student Programs | richa186@purdue.edu | Approved |
| University of Chicago | Rita Vazquez | Associate University Registrar | rvazquez1@uchicago.edu | Approved |
| University of Illinois | Domonic Cobb | Associate Dean of Students | dcobb@illinois.edu | Approved |
| University of Iowa | Travis Arment | Military & Veteran Educational Specialist | Travis-Arment@uiowa.edu | Approved |
| University of Maryland | Marsha Guenzler-Stevens | Director, Adele H Stamp Student Union | mguenzle@umd.edu | Denied |
| University of Michigan | Philip Larson | Program Director for the Student Veterans Assistance Program | pnlarson@umich.edu | Approved |
| University of Minnesota | Julie Selander | Director, One Stop Student Services & University Veterans Services | goode021@umn.edu | Denied |
| University of Nebraska-Lincoln | Michelle Waite | Assistant to the Chancellor For Community Relations | mwaite1@unl.edu | Approved |

Note: Contact information may be out of date by time of defense.

# APPENDIX I. TWO-YEAR INSTITUTIONS CONTACTED FOR RECRUITMENT

| Purdue/Indiana University | Michigan State University/ University of Michigan | Ohio State | University of Illinois/ University of Chicago | University of Minnesota |
|---|---|---|---|---|
| Ivy Tech Anderson | Alpena CC-Alpena | Belmont Technical College | Black Hawk College | Alexandria Technical and Community College |
| Ivy Tech Batesville | Bay College -Escanaba | Firelands | Carl Sandburg College | Anoka-Ramsey Community College |
| Ivy Tech Bloomington | Mott CC-Flint | Central Ohio Technical College | Harold Washington College | Anoka Technical College |
| Ivy Tech Columbus | Delta College-University Center | Cincinnati State Technical & Community College | Harry S Truman College | Central Lakes College |
| Ivy Tech Connersville | Glen Oaks CC-Centreville | Clark State Community College | Kennedy–King College | Century College |
| Ivy Tech Crawfordsville | Gogebic CC-Ironwood | Columbus State Community College | Malcolm X College | Dakota County Technical College |
| Ivy Tech East Chicago | Grand Rapids CC-Grand Rapids | Cuyahoga Community College System | Olive–Harvey College | Fond du Lac Tribal and Community College |
| Ivy Tech Elkhart County | Henry Ford College-Dearborn | Davis College | Richard J. Daley College | Hennepin Technical College |
| Ivy Tech Evansville | Jackson College-Jackson | Edison State Community College | Wilbur Wright College | Hibbing Community College |
| Ivy Tech Fort Wayne | Kalamazoo Valley CC-Kalamazoo | Hocking College | College of DuPage | Inver Hills Community College |
| Ivy Tech Gary | Kellogg CC-Battle Creek | Eastern Gateway Community College | College of Lake County | Itasca Community College |
| Ivy Tech Greencastle | Kirtland CC-Roscommon | Ashtabula | Danville Area Community College | Lake Superior College |
| Ivy Tech Henry County-New Castle | Lake Michigan College-Benton Harbor | East Liverpool | Metropolitan Community College | Mesabi Range Community and Technical College |
| Ivy Tech Indianapolis | Lansing CC-Lansing | Geauga | State Community College of East Saint Louis | Minneapolis Community and Technical College |
| Ivy Tech Kokomo | Macomb CC-Warren | Salem | Elgin Community College | Minnesota State College – Southeast Technical |

| Purdue/Indiana University | Michigan State University/ University of Michigan | Ohio State | University of Illinois/ University of Chicago | University of Minnesota |
|---|---|---|---|---|
| Ivy Tech Lafayette | Mid Michigan CC-Harrison | Stark | Harper College | Minnesota State Community and Technical College |
| Ivy Tech Lawrenceburg | Monroe County CC-Monroe | Trumbull | Heartland Community College | Minnesota West Community and Technical College |
| Ivy Tech Logonsport | Montcalm CC-Sidney | Tuscarawas | Highland Community College | Normandale Community College |
| Ivy Tech Madison | Muskegon CC-Muskegon | Lakeland Community College | Illinois Central College | North Hennepin Community College |
| Ivy Tech Marion | North Central Michigan College-Petoskey | Lorain County Community College | Frontier Community College | Northland Community & Technical College |
| Ivy Tech Michigan City | Northwestern Michigan College-Traverse City | Marion Technical College | Lincoln Trail College | Pine Technical College |
| Ivy Tech Muncie | Oakland CC-Bloomfield Hills | Hamilton | Olney Central College | Rainy River Community College |
| Ivy Tech Noblesville | St Clair County CC-Port Huron | Middletown | Wabash Valley College | Red Lake Nation College |
| Ivy Tech Richmond | Schoolcraft College-Livonia | VOA Learning Center | Illinois Valley Community College | Ridgewater College[5] |
| Ivy Tech Sellersburg | Southwestern Michigan College-Dowagiac | Greentree HSA | John A. Logan College | Riverland Community College |
| Ivy Tech South Bend | Washtenaw CC-Ann Arbor | | John Wood Community College | Rochester Community & Technical College |
| Ivy Tech Tell City | Wayne County CC-Detroit | | Joliet Junior College | St. Cloud Technical and Community College |
| Ivy Tech Terre Haute | West Shore CC-Scottville | | Kankakee Community College | Saint Paul College |
| Ivy Tech Valparaiso | Bay Mills Community College-Brimley | | Kaskaskia College | South Central College |
| Ivy Tech Wabash | | | Kishwaukee College | Vermilion Community College |
| Ivy Tech Warsaw | | | Lake Land College | White Earth Tribal and Community College |
| | | | Lewis and Clark Community College | |
| | | | Lincoln Land Community College | |

| Purdue/Indiana University | Michigan State University/ University of Michigan | Ohio State | University of Illinois/ University of Chicago | University of Minnesota |
|---|---|---|---|---|
| | | | McHenry County College<br>Moraine Valley Community College<br>Morton College<br>Oakton Community College<br>Parkland College<br>Prairie State College<br>Rend Lake College<br>Richland Community College<br>Rock Valley College<br>Sauk Valley Community College<br>Shawnee Community College<br>South Suburban College<br>Southeastern Illinois College<br>Southwestern Illinois College<br>Spoon River College<br>Triton College | |

## Two-year Institutions Contacted for Recruitment cont.

| University of Iowa | University of Maryland | University of Lincoln-Nebraska | Penn State | Arizona State |
|---|---|---|---|---|
| Des Moines Area Community College | Allegany College of Maryland | Central Community College | Penn State Abington | Chandler-Gilbert Community College |
| Clinton Community College | Anne Arundel Community College | Metropolitan Community College | Penn State Altoona | Estrella Mountain Community College |
| Muscatine Community College | Baltimore City Community College | Mid-Plains Community College | Penn State Beaver | GateWay Community College |
| Scott Community College | Carroll Community College | Nebraska College of Technical Agriculture | Penn State Behrend | Glendale Community College |
| Hawkeye Community College | Cecil College | Nebraska Indian Community College | Penn State Berks | Mesa Community College |
| Indian Hills Community College | Chesapeake College | Northeast Community College | Penn State Brandywine | Paradise Valley Community College |
| Iowa Central Community College | College of Southern Maryland | Southeast Community College | Penn State DuBois | Phoenix College |
| Iowa Lakes Community College[3] | Community College of Baltimore County | Western Nebraska Community College | Penn State Fayette | Rio Salado College |
| Ellsworth Community College | Frederick Community College | | Penn State Greater Allegheny | Scottsdale Community College |
| Iowa Valley Community College (Grinnell)[3] | Garrett College | | Penn State Harrisburg, The Capital College | South Mountain Community College |
| Marshalltown Community College | Hagerstown Community College | | Penn State Hazleton | Arizona Western College |
| Iowa Western Community College | Harford Community College | | Penn State Lehigh Valley | Central Arizona College |
| Kirkwood Community College | Howard Community College | | Penn State Mont Alto | Cochise College |
| North Iowa Area Community College | Montgomery College | | Penn State New Kensington | Coconino Community College |
| Northeast Iowa Community College | Prince George's Community College | | Penn State Schuylkill | Diné College |
| Peosta Northeast Iowa Community College | Wr–Wic Community College | | Penn State Shenango | Eastern Arizona College |

| University of Iowa | University of Maryland | University of Lincoln-Nebraska | Penn State | Arizona State |
|---|---|---|---|---|
| Calmar | | | | |
| Northwest Iowa Community College<br>Southeastern Community College Keokuk Campus<br>Southeastern Community College West Burlington Campus<br>Southwestern Community College<br>Western Iowa Tech Community College | | | Penn State Wilkes-Barre<br>Penn State Worthington Scranton<br>Penn State York | Gila Community College<br>Mohave Community College<br>Northland Pioneer College<br>Pima Community College<br>Tohono O'odham Community College<br>Yavapai College |

# APPENDIX J. RECRUITMENT EMAIL

FROM: Karen Miller (mill1158@purdue.edu)

REPLY TO: Karen Miller (mill1158@purdue.edu)

SUBJECT: Participate for a chance to win a $25 Amazon gift card- Research project involving veteran and military students

Dear Veteran or Military Student,
My name is Karen Miller, and I am a doctoral student in Counseling Psychology at Purdue University. I am currently working on a research project under the direction of my advisor, Dr. Heather L. Servaty-Seib, with the purpose of studying veteran and military students' experiences in college. This study is approved by the Purdue University Institutional Review Board (IRB Research Project Number: 1506016213).

**Eligibility Criteria**
To participate in this study you must be enrolled at least part-time in a 2-year or 4-year, degree granting institution, be 18 years of age or older, and must identify as a Veteran, or currently serving as National Guard, Reserves or Active Duty service member in a branch of the U.S. military (i.e., Air Force, Army, Coast Guard, Marine Corps, Navy). This study will be conducted through an online survey and should take about 20 minutes to complete. If you choose to participate, you will provide all information anonymously. Your answers will be kept completely private, and no will be able to trace your survey responses back to you.

**Compensation**
At the end of the survey, you will have the opportunity to be entered into a drawing for one of four $25 gift cards to Amazon.com. Winners will be selected at random. Electing to participate in the drawing does not impact the anonymity of your responses; your survey answers are not connected to the information you provide to enter into the drawing. The odds of winning are dependent on the number of responses received, but are expected to be 1 in 200 or better.

**Thank you**
Your responses will give counselors and student services personnel a fuller understanding of your experiences in college. This information is very important and will help them to better serve you and future veteran and military students. Thank you for your consideration.

https://purdue.ca1.qualtrics.com/jfe/form/SV_dalln4RXIE45My1
If you have any questions, please feel free to contact me at mill1158@purdue.edu or my advisor Dr. Heather L. Servaty-Seib at servaty@purdue.edu.

Karen Miller, M.A.
Counseling Psychology Doctoral Student
Purdue University

# APPENDIX K. FACEBOOK STATUS

VETERAN AND MILITARY STUDENTS…please consider taking this survey about your college experience. This research will help inform interventions for veteran and military college students. This study has been determined to be exempt by Purdue University's Institutional Review Board. Responses are anonymous, and you can skip any questions or leave the survey at any time. In order to complete this survey, you must be enrolled at least part-time in a 2-year or 4-year, degree granting institution, be 18 years of age or older, and must identify as a Veteran, or currently serving as National Guard, Reserves or Active Duty service member in a branch of the U.S. military (i.e., Air Force, Army, Coast Guard, Marine Corps, Navy).

Thank you for your participation!

https://purdue.ca1.qualtrics.com/jfe/form/SV_dalln4RXIE45My1

# APPENDIX L. FOLLOW-UP EMAIL

FROM: Karen Miller (mill1158@purdue.edu)

REPLY TO: Karen Miller (mill1158@purdue.edu)

SUBJECT: Participate for a chance to win a $25 Amazon gift card- Research project involving veteran and military students

Dear Veteran or Military Student,

I am emailing to follow up regarding an email you received last week about a study I am conducting. If you have completed the survey – thank you, and you need not read further. If you have not yet completed the survey, please consider taking part in my study.
My name is Karen Miller, and I am a doctoral student in Counseling Psychology at Purdue University. I am currently working on a research project under the direction of my advisor, Dr. Heather L. Servaty-Seib, with the purpose of studying veteran and military students' experiences in college. This study is approved by the Purdue University Institutional Review Board (IRB Research Project Number: 1506016213).

**Eligibility Criteria**
To participate in this study you must be enrolled at least part-time in a 2-year or 4-year, degree granting institution, be 18 years of age or older, and must identify as a Veteran, or currently serving as National Guard, Reserves or Active Duty service member in a branch of the U.S. military (i.e., Air Force, Army, Coast Guard, Marine Corps, Navy). This study will be conducted through an online survey and should take about 20 minutes to complete. If you choose to participate, you will provide all information anonymously. Your answers will be kept completely private, and no will be able to trace your survey responses back to you.

**Compensation**
At the end of the survey, you will have the opportunity to be entered into a drawing for one of four $25 gift cards to Amazon.com. Winners will be selected at random. Electing to participate in the drawing does not impact the anonymity of your responses; your survey answers are not connected to the information you provide to enter into the drawing. The odds of winning are dependent on the number of responses received, but are expected to be 1 in 200 or better.

**Thank you**
Your responses will give counselors and student services personnel a fuller understanding of your experiences in college. This information is very important and will help them to better serve you and future veteran and military students. Thank you for your consideration.

https://purdue.ca1.qualtrics.com/jfe/form/SV_dalln4RXIE45My1
If you have any questions, please feel free to contact me at mill1158@purdue.edu or my advisor Dr. Heather L. Servaty-Seib at servaty@purdue.edu.

Karen Miller, M.A.
Counseling Psychology Doctoral Student
Purdue University

# APPENDIX M. ONLINE CONSENT FORM

RESEARCH PARTICIPANT ONLINE CONSENT FORM
Culture Clash: Veteran and Military Students' Experiences in College
(IRB Research Project Number: 1506016213)
Heather L. Servaty-Seib, Ph.D.
Purdue University
Educational Studies
*Please Print this Information Sheet for Your Records*

**Purpose of Research**
The purpose of the current study is to gather information on veteran and military students' experiences in college.

**Specific Procedures**
The following online survey includes questions focused on perceptions of discrimination in college, your cultural fit within the institution, and gains related to college. Participants must be enrolled at least part-time in a 4-year, degree granting institution, be 18 years of age or older, and must identify as Retired, Veteran, or currently serving as National Guard, Reserves or Active Duty service member in a branch of the U.S. military (i.e., Air Force, Army, Coast Guard, Marine Corps, Navy).

Your information is relevant to this study. After reading this form, please click the "participate in the study" button below if you wish to participate. You will then be directed to the online survey and after completing the questions you will be asked if you want your responses to be recorded. You will also be provided with the opportunity to be entered into a drawing for four $25 Amazon.com gift cards. All survey answers will be collected anonymously.

**Duration of Participation**
This survey will take approximately 20 minutes to complete.

**Risks and Discomforts**
There are no foreseeable or significant risks or adverse effects associated with this study. A breach of confidentiality is a possible risk associated with research. However, safeguards have put in place to minimize this risk. The risk of participating in this study is considered minimal and no greater than you would encounter in everyday life. It is possible that these questions may be connected with some emotional discomfort for you. If you would like or need emotional support and related assistance, you can contact a counselor near you by logging on to: www.purdue.edu/caps.

**Benefits**
There are no obvious personal benefits from participating in this study.

**Compensation**
You will have the option to participate in a drawing for one of four $25 Amazon.com gift cards.

At the end of this survey, you will be given the opportunity to click on a link to provide your email address for entrance into a random drawing. The website used to collect the emails for the drawing is completely separate from the website containing the questionnaire responses. Electing to participate in the drawing does not impact the anonymity of your responses; your survey answers are not connected to the email you send to enter into the drawing. At the end of this study, four email addresses will be randomly chosen to receive a $25 gift card. The odds of winning will be1 in 200 or better. The individuals chosen from this random drawing will receive an email directly from Amazon.com with their gift card information included.

**Confidentiality**

The privacy and confidentiality of your responses will be protected through multiple methods. We will collect your survey responses anonymously. You are not asked to provide your name or any identifying material other than general demographic information. Your survey answers will not be able to be traced directly to you or your email address. All completed forms will be kept in a secure computer database. Only the IT department and the co-investigators of this study will be able to access the data. The data from this study will be analyzed collectively, including all responses to this survey. The data will be kept indefinitely, but any reports, publications, or related documents will be reported on an aggregate (not individual) level. The project's research records may be reviewed by the Institutional Review Board at Purdue University to ensure that your data is being properly protected.

**Voluntary Nature of Participation**

You do not have to participate in this research project. If you agree to participate, you can withdraw your participation at any time, and you can skip questions if you choose without penalty.

**Contact Information**

If you have any questions about this research project, you can contact either Heather L. Servaty-Seib at (765) 494-0837 or servaty@purdue.edu or Karen Miller at mill1158@purdue.edu. If you have concerns about the treatment of research participants, you can contact the Institutional Review Board at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. The phone number for the Board is (765) 494-5942. The email address is irb@purdue.edu.

**Documentation of Informed Consent**

I have read the information provided above which describes this research study and my participation in the study. I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I am prepared to participate in the research project described above. By completing this survey, I acknowledge that I understand my rights as a research participant and volunteer to participate. I can print a copy of this consent form for my records.

(Participants will have the option to select: 1) I do wish to participate in this study or 2) I do not wish to participate in this study.)

*Please Print this Information Sheet for Your Records*

# APPENDIX N. LOG-OUT MESSAGE WITH GIFT CARD DRAWING INFORMATION

Thank you for your participation! Your responses will give counselors and student services personnel a fuller understanding of your experiences in college. This information will help them to better serve you and future veteran and military-connected students.

You are done with the questionnaire and can move on to the next page at any time.

When you click on the link below, you will automatically be redirected to a new, unconnected survey. If you want to be entered for a drawing to win one of at least four $25 Amazon.com gift cards, please enter your email address in this survey.

Winners' gift cards will be sent to the email submitted through the survey, so please use an email address you check regularly. Your email address will not be used for any other purpose and is not connected to your survey responses.

https://purdue.qualtrics.com/jfe/form/SV_eKBzxcCtZ3tBqcZ

# APPENDIX O. NON-HYPOTHESIZED FINDINGS IN PRELIMINARY ANALYSES

## Preliminary Analyses with Demographic Variables

In this section, I review the preliminary analyses I performed before performing the primary analyses. I first review the correlations I performed among the continuous background variables (i.e., age, socioeconomic status, number of total credits, number of institutions attended, number of total months in service, number of months since seen combat, military centrality) and the primary variables (i.e., perceived discrimination, cultural congruity, college-related gains, life satisfaction, likelihood to persist). Next, I review the preliminary analyses I conducted to determine if any of the primary variables varied based on the categorical variables (i.e., relationship status, time in college as desirable or undesirable, institution region, military friendliness of institution, 2-year/4-year institution type, enrollment status, year in school, total years in school, military branch, military service status, mobilization, deployment, combat, injury, injury-related medical benefits, mental health-related medical benefits).

### Continuous Variables

I performed bivariate correlations between all the continuous background variables and the primary variables. I only considered controlling for those variables (i.e., covariates) that were significant at or below .01 and had a medium or greater effect size (i.e., $r \geq .30$; Cohen, 1988; Table 7). The only variable that met these criteria was SES. Please see results section for review of those finding (p. 78). There were four other correlations that emerged as significant, but did not meet the criteria for inclusion as covariates. Specifically there were significant positive relationships between cultural congruity and age ($r = .16$, $p < .05$), and total number of months in

service ($r$ = .15, $p$ < .05). There was also a significant positive relationship between life satisfaction and number of total credits completed ($r$ = .16, $p$ < .05), and military centrality ($r$ = .15, $p$ < .05).

**Categorical Variables**

I performed a series of MANOVAs to determine if the primary variables differed based on the categorical background variables, excluding gender, race and ethnicity, and sexual orientation, as they were included in the primary analysis. The 16 categorical background variables were relationship status, time in college as desirable or undesirable (i.e., the last question of the PILES, college-related gains measure), institution region, military friendliness of institution, 2-year/4-year institution type, enrollment status, current year in school, number of years attended higher education based on semesters or trimesters completed (i.e., total years in school), military branch, military service status, mobilization status within last 12 months (i.e., mobilization), deployment status within last 12 months (i.e., deployment), whether or not they have spent time in a combat zone (i.e., combat), whether or not they had been injured due to service, (i.e. injury), whether or not they were receiving medical or disability benefits due to service related injuries (i.e., injury-related medical benefits), and whether or not they were receiving mental health-related medical benefits die to their time in service (i.e., mental health-related medical benefits). I only considered controlling for variables (i.e., covariates) that were significant at .01 or lower and had a medium effect size (i.e., ≥ .13; Pierce et al., 2004). The only variables that met that criteria were mental health-related medical benefits for RQ1 and college as desirable or undesirable on RQ3 and RQ5. Please see results section for review of those finding (pp. 81-82). There were two additional variables that emerged with significant group differences, but did not meet the criteria for inclusion as covariates.

Specifically, a significant difference emerged based on relationship status, $F(30, 694) = 1.50$, $p = .043$, Wilk's $\lambda = .78$, $\eta^2 = .05$. At the univariate level, there were differences on life satisfaction, $F(6, 159.05) = 3.53$, $p = .003$, $\eta^2 = .11$. Specifically, post-hoc analysis indicated that married participants ($M = 24.73$, $SD = 6.58$) scored significantly higher on life satisfaction than divorced participants ($M = 17.00$, $SD = 7.33$)

Furthermore, a significant difference emerged based on year in school, $F(25, 603.31) = 1.62$, $p = .030$, Wilk's $\lambda = .79$, $\eta^2 = .05$. At the univariate level, there were differences on life satisfaction $F(5, 154.08) = 3.35$, $p = .007$, $\eta^2 = .09$, and the likelihood to persist $F(5, 861.69) = 3.31$, $p = .007$, $\eta^2 = .09$. Specifically, post hoc analyses indicated that first-year undergraduate participants scored significantly lower on life satisfaction ($M = 19.65$, $SD = 8.14$) and the likelihood to persist ($M = 97.12$, $SD = 11.93$) than master's level participants ($M = 25.48$, $SD = 6.71$; $M = 110.02$, $SD = 16.32$, respectively).

# VITA

Karen A. Miller

## EDUCATION

Ph.D. **Counseling Psychology,** Purdue University, West Lafayette, Indiana, 2019
*Advisor:* Heather Servaty-Seib, Ph.D., HSPP
DISSERTATION: *Veteran and Military-Connected Students' Experiences in College*

M.A. **Counseling, emphasis in College Student Services,** Saint Mary's College of California, Moraga, California, 2011
THESIS PROJECT: *College student bereavement: A model for intervention and support*

B.A. **Teledramatic Arts and Technology, Minor in Psychology,** California State University Monterey Bay, Seaside, California, 2005

## CLINICAL EXPERIENCE

**Pre-Doctoral Internship, UC Davis Student Health and Counseling Center** 2018-2019
University of California-Davis, Davis, California

- Provided individual and group therapy to undergraduate and graduate college students, including career counseling
- Participated in Eating Disorder Management Team
- Participated in committee and workgroup projects, as needed
- Collaborated with interdisciplinary teams in building treatment plans for clients
- Conducted outreach workshops pertaining to issues such as psychology careers and career assessments
- Clinical Supervisors: Tegan Adams, Psy.D.; Karin Nilsson, Ph.D.; Dorje Jennette, Psy.D.

**Advanced Practicum, Charis Center for Eating Disorders** 2014-2015
IU Health, Indianapolis, Indiana

- Provided individual and group therapy to patients in a partial hospitalization program
- Participate in treatment meetings and clinical didactics
- Clinical Supervisor: Natalie Cumberlander-Zolicoffer, Ph.D., HSPP

Pr**ogram Counselor, Magnify Program** 2014-2015
Tippecanoe School Corporation and Purdue University, West Lafayette, Indiana

- Individual and group counseling to high school students; presenting concerns include mood disorders, adjustment issues, and grief
- Clinical Supervisor: Christopher Slaten, Ph.D.

**Advanced Practicum, IUPUI Counseling and Guidance Center** 2013-2014
Indiana University-Purdue University Indianapolis, Indianapolis, Indiana

- Provided individual counseling services to a diverse group of students in the Indianapolis metropolitan area
- Conducted group interventions, and attended clinical didactics

- Clinical Supervisors: Michael Hines, Psy.D., HSPP; Kory Carey, Ph.D., HSPP

**Intake Specialist, BRIDGe,** 2013 & 2014
Purdue University, West Lafayette, Indiana

- Conducted intakes with parents and children participating in a grief group
- Clinical Supervisor: Heather L. Servaty-Seib, Ph.D., HSPP

**Practicum, Purdue Counseling and Guidance Center** 2012-2013
Purdue University, West Lafayette, Indiana

- Provided individual counseling in a clinical setting with college students and community members
- Administer career and personality assessments
- Clinical Supervisors: Heather L. Servaty-Seib, Ph.D., HSPP; M. Carole Pistole, Ph.D.

**Graduate Internship, High Potential Program** 2011-2012
Saint Mary's College of California, Moraga, California,

- Individual counseling and academic advising with college students, with a focus on first-generation, low income students and students of color
- Clinical Supervisor: Maria Angelica Garcia, MSW, Ed.D**.**

## SCHOLARSHIP

*Publications*

**Miller, K. A.** & Servaty-Seib, H. L. (2016). First-year students' loss experiences and institutional belongingness in the transition to college, *Journal of First-Year Experience and Students in Transition, 28*(2), 53-72. Retrieved from http://www.ingentaconnect.com/contentone/fyesit/fyesit/2016/00000028/00000002/art00003

Deemer, E. D., Reed Marks, L., **Miller, K. A.** (2017). Peer Science Self-Efficacy: A contextual support for college students' science career intentions, *Journal of Career Assessment*, 1-15. doi: 10.1177/1069072716651620

*Presentations*

**Miller, K. A.,** & Servaty-SEib. H. L. (2014) *First-year students' loss experiences and institutional belongingness in the transition to college*. 33rd Annual Conference on the First-Year Experience, San Diego, California, February 2014

**Miller, K. A.** (2013). *College student bereavement: A model for intervention and support.* Association for Death Education and Counseling (ADEC) 2013 Annual Conference, Hollywood, California.

**Miller, K. A., & Ploskonka, R.** (2013). *Stand Down Event.* Academic Community Engagement Poster Presentation, Purdue University, West Lafayette, Indiana.

## RESEARCH EXPERIENCE

**PURDUE UNIVERSITY,** West Lafayette, Indiana 2012-2015
*Research Assistant (August 2014- December 2014)*

- Conducted qualitative research with adolescents regarding beliefs about engineering and science
- Processed and analyzed quantitative and qualitative data
- Worked with community schools and teachers to gather data

*Research Specialist, Military Family Research Institute (January 2013-May 2013)*

- Provided support to the Promoting Action on Credit Transfer (PACT) 4-state consortium

- Reviewed existing research and collaborated with research teams
- Assessed data and prepared reports

## TEACHING EXPERIENCE

**PURDUE UNIVERSITY,** West Lafayette, Indiana 2012-2015

*Instructor, Academic and Career Planning (August 2012-Decemeber 2012)*

- Provided instruction to first-year students regarding academic and career planning
- Administered and provided feedback on career assessments, including the Meyers-Briggs Type Indicator, NEO Five-Factor Inventory-3, and the Self-Directed Search
- *Recitation Instructor, Creating and Managing Learning Environments (August 2012-Decemeber 2012)*
- Provided recitation instruction to a class of junior and senior Elementary Education students
- Led discussions on topics such as behavior management, differentiated lessons plans, and related case studies

*Instructor, Collaborative Leadership: Listening (August 2015-December 2015)*

- Provided instruction to undergraduate students regarding collaborative leadership skills, including basic listening skills, empathy, negotiation, and difficult conversations
- Supervised their practical skills with the use of role plays and reflections on daily conversations
- Organized and created class materials and lesson plans
- Evaluated student performance through class participation, written assignments, role play assignments, and use of group discussion

*Instructor, Collaborative Leadership: Mentoring (January 2015- May 2015)*

- Provided instruction to undergraduate students regarding mentoring types, perspectives, skills, and ethics
- Provided supervision to the students in their mentoring relationships
- Organized and created class materials and lesson plans
- Evaluated student performance through class participation, written assignments, and use of supervision

## HIGHLIGHTS OF OTHER PROFESSIONAL EXPERIENCE

**EATING RECOVERY CENTER OF CALIFORNIA,** Sacramento, California 2015-2018

*Behavioral Health Counselor (June 2015-August 2015)*

- Provided therapeutic services to Partial Hospitalization Program and Intensive Outpatient Program patients
- Facilitated therapeutic groups (e.g., DBT, ACT, CBT)
- Provided therapeutic redirection during meal times and in the milieu
- Charted patient progress using online Electronic Medical Record (EMR) system
- Helped build and adapt curriculum for therapeutic groups
- Built relationships with outpatient providers to provide consistent care
- Supervisor: Lisa Petersen, Ph.D., HSPP

**PURDUE UNIVERSITY,** West Lafayette, Indiana 2012-2015

*Graduate Advisor, Purdue Student Union Board (August 2013- May 2014)*

- Provided supervision to Purdue Student Union Board committee directors to develop their leadership and engagement skills
- Planned and implemented large scale events at the Purdue Memorial Union
- Collaborated across campus with cultural centers, faculty, staff, and student groups

**SAINT MARY'S COLLEGE OF CALIFORNIA,** Moraga, California 2007-2012
*Interim Academic Advisor (March 2011-October 2011)*

- Provided academic, emotional, and personal guidance to a diverse caseload of undergraduate students
- Led academic workshops and information sessions
- Supported the development of curriculum for the High Potential Program
- Developed academic plans and support major exploration
- Acted as a referral resource for students who needed further assistance
- Advised academically at-risk and probation students to work toward academic success
- Built and maintained connections with academic departments and faculty members to support academic success

*Resident Director (2010-2012)*

- Oversaw the development of the Resident Advisor
- Created an inclusive community built on respect and clear communication
- Developed events and activities to support the social and academic growth of the students
- Extensive knowledge of FERPA and Clery Act

*Administrative Assistant and Summer Bridge Coordinator (2007-2012)*

- Provided administrative support to Academic Advising Center and High Potential Program director and 3 coordinators
- Provided managerial support, direction, training to and assessment of 4-6 students workers
- Created charts and reports regarding student-staff interactions
- Provided all coordination for 2-week residential summer bridge program
- Managed Lamont Madden Book Fund- provided books to low income students; secured $10,000 grant for Fund
- Maintained student database

**SENECA CENTER**, San Leandro, California 2006-2007
*Mental Health Assistant/Classroom Counselor/Residential Counselor*

- Provide mental health services, classroom support, and academic tutoring for at risk students
- Served as a residential counselor in San Francisco General Hospital and various group homes
- Worked one-on-one and in group settings with students
- Updated student records and documented student progress
- Provided crisis intervention and behavioral modification

**CALIFORNIA STATE UNIVERSITY, MONTEREY BAY**, Seaside, California 2002-2005
**Lower Division Academic Advising Office**
*Academic Peer Advisor (2003-2005).*

- Advised students on general education and created learning plans
- Answered inquires from students and parents on academic coursework and school policies
- Led orientation workshops each fall semester
- Updated student records in university database

*International Programs Specialist (2002)*

- Provided administrative and program support for coordinator and served as advisor for students interested in studying abroad
- Planned workshops to inform students of international study opportunities
- Advised students on travel abroad
- Updated student records in university database

**CHILDREN'S SERVICES OF MONTEREY BAY**, Marina, California 2002-2005

*Residential Counselor*

- Provided temporary and on-call assistance in youth group homes over the course of three years
- Provided crisis intervention and suicide watches in emergency situations
- Served as residential counselor supporting the residents' day to day operations and development of life skills
- Provided one-on-one interventions and learning opportunities for residents

## ACADEMIC HONORS AND AWARDS

- Purdue Research Foundation Year-Long Research Grant, Purdue University, 2015-2016
- Cecelia Zissis Graduate Student Scholarship, Purdue University, 2015-2016
- Graduated Summa Cum Laude, Saint Mary's College of California, 2011
- Service Learning Award for major, California State University Monterey Bay, 2005
- Distinction in Major for outstanding contributions to academic program, California State University Monterey Bay, 2005

## PROFESSIONAL DEVELOPMENT AND AFFLIATIONS

***Conference Participant,*** NASPA Symposium on Military Connected Students, Orlando, Florida, 2016

***Conference Participant and volunteer,*** Indiana Psychological Association Fall Conference, Indianapolis, Indiana, 2015

***Student Representative,*** Science and Education committee, Indiana Psychological Association, 2015-2017

***Purdue Student Representative,*** Indiana Psychological Association Student Organization, 2015-2017

***Proposal Reviewer,*** 34th Annual Conference on The First-Year Experience, 2015

***Grad Student Affiliate,*** APA, American Psychological Association, 2012-present

***Student Affiliate,*** Division 17, Society of Counseling Psychology, 2012-2017

***Student Affiliate,*** Division 56, Trauma Psychology, 2014-2015

***Student Member***, California Psychological Association, 2014-2017

***Student Member***, Eating Disorders Task Force of Indiana, 2014-2015

***Student Member,*** Indiana Psychological Association, 2014-present

***Student Member,*** ADEC, Association for Death Education and Counseling, 2012-2013
***Training participant,*** Stop the Hate Trainer Workshop, Saint Mary's College of California, 2011
***Conference participant,*** National Conference on Race and Ethnicity in Higher Education (NCORE), San Francisco, California, 2011
***Member,*** NACADA- National Academic Advising Association, 2010-2012
***Member,*** NASPA- Student Affairs Administrators in Higher Education, 2010-2012
***Workshop participant,*** Campus of Difference: Inclusivity and Diversity at Saint Mary's College, Saint Mary's College of California, 2009 and 2010

## COMMUNITY INVOLVEMENT

***Crisis intervention,*** Purdue University, West Lafayette, Indiana, 2014

- Provided support to the Office of the Dean of Students after a shooting incident on the Purdue campus
- Helped triage students and faculty and refer to appropriate on-campus services

***BRIDGE Intake Counselor***, Purdue University, West Lafayette, Indiana, 2013-2014

- Provided intake counseling services to the BRIDGE grief group
- Wrote intake reports on children and parents

***Treasurer***, Counseling and Development Student Group, Purdue University, West Lafayette, Indiana, 2012-2013

- Managed organization budget and processed reimbursements
- Acted as organization member and helped create and implement activities and events

***Family Game Night***, Counseling and Development Student Group, Lafayette, Indiana, 2013

- Teamed with the Boys and Girls Club of Lafayette to provide families the opportunity to gather and play interactive games to develop more effective communication skills

***Stand Down Event,*** Lafayette, Indiana, 2012

- Provided career counseling resources to homeless and non-homeless veterans in conjunction with the Military Family Research Institute (MFRI)
- Applied for and received Indiana Campus Connect (ICC) Mini Grant to purchase materials (e.g., pocket calendars, career interest inventories); submitted written reports to ICC about the event and the funds used

***Hospice volunteer,*** Walnut Creek, California, 2012

- Provided friendly visits for patients, and respite for their caretakers
- Helped clients tell their life stories through voice recordings and video creation

***Member***, **Stop the Hate Trainer Group and Bias Incident Response Team**, Saint Mary's College of California, 2011-2012

- Acted as campus representative in disseminating Stop the Hate information and workshops
- Served as a member of the Bias Incident Response Team, which intervenes with educational and supportive response to acts of bias on Saint Mary's campus

***Member/Sub-committee Chair,*** **Staff Council**, Moraga, California, 2008-2012

- Acted as staff representative at council meetings, and chair elect of Staff Council
- Served on Sustainability Committee, Health Insurance Review Committee, and Facilities Planning Committee

***Member,*** **Sexual Assault Crisis Response Team**, Moraga, California, 2008-2012

- Created a safe contact for students at SMC to reach in case of an emergency, specifically regarding sexual assault

- Acted as an anonymous resources and referral center to provide the student assistance

***Participant/Facilitator***, **2-Week Intensive Theater Workshop**, Fresno, California, 2004

- Taught theater and storytelling to a group of incarcerated youth at Elkhorn Correctional Facility near Caruthers, California
- Continued to work with the young men afterward on educational goals and college preparedness