


Spring 2023

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Terezia A. Dean

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THE RELATIONSHIP OF ACADEMIC INTEGRATION TO COLLEGE PERSISTENCE FOR FEMALE MILITARY-AFFILIATED STUDENTS

by

TEREZIA A. DEAN

Under the Direction of Antonio P. Gutierrez de Blume, Ph.D.

ABSTRACT

While the field of female military-affiliated student-specific research is growing, understanding the compounding challenges of these dynamic students through their different identities is necessary to support them in their academic endeavors. This quantitative study examined the relationship between academic integration and college persistence for female military-affiliated students at a four-year research institution. This study intended to understand the relationship between pre-entry attributes of female military-affiliated students and the likelihood of stop out and dropout. Having data from a diverse population of ages, branches, and ethnicities paints a picture detailing the many pre-entry attributes that can decrease the likelihood of persistence. Using Tinto's (1993) Institutional Departure Model as the foundation for this study, predictors of academic coaching and tutoring influence of academic integration factors were identified, and pre-entry attributes influencing college persistence emerged. Findings from this study can inform faculty, staff, and administrators about the factors affecting stop out and dropout of this growing and underserved population and how to increase the likelihood of college completion.

INDEX WORDS: Veteran, Female, Military-Affiliated student, Tinto, Academic integration, Persistence, Retention, Military student

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FEMALE MILITARY-AFFILIATED STUDENTS

by

TEREZIA A. DEAN

B.A., Walsh University, 2010

M.B.A., Walsh University, 2013

A Dissertation Submitted to the Graduate Faculty at Georgia Southern University

in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

COLLEGE OF EDUCATION

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by

TEREZIA A. DEAN

Major Professor:
Committee:

Antonio P. Gutierrez de Blume
Elise J. Cain
Stefane D. Raulerson
Sabrina Ross

Electronic Version Approved:
May 2023

DEDICATION

Mom – You never let an opportunity go by to tell me how proud of me you are. I know you are convinced I will be the Secretary of Education one day, and I will always remind you that no one likes the Secretary of Education. You are intelligent, strong, and loving, and I appreciate your support throughout my never-ending academic career.

Katie and Mary – Whenever someone compliments or applauds me on my academic accomplishments, I always say, but let me tell you what my sisters have done. For me, it was perseverance; but for you two, it was raising a family, balancing work, navigating the student role as an adult, and so much more. I have always known you both to be dedicated and strong-willed women, but after this journey, I am in awe of your perseverance.

Dad – I wish you could be here to see what I have accomplished, but I know you have been with me throughout this journey. I love you and miss you every day.

Finally, I dedicate this to the strong, passionate, and determined military-affiliated females pursuing their education. With no prior knowledge of our military students on college campuses, the past four and a half years have opened my eyes to the powerful beings they are. My dedication and desire to continue to help support and serve this extraordinary community only grow from here.

ACKNOWLEDGMENTS

I would first like to thank Ryan, who allowed me to pursue every academic endeavor I dreamed of. From finishing my MBA to returning and receiving my teaching license, and finally, a doctorate. The long hours of writing and homework, small victories along the way - always reminding me I did not want to quit. You are the support I needed to finish. At least you got a PS5 out of this.

My wonderful committee chair, Dr. Antonio Gutierrez de Blume. I could not have done it without you. There was no other committee member I even considered because I knew you would help me achieve everything I wanted from this experience. We faced many challenges—people, policies, communications – but you kept reminding me I had a good study. You saw me through a challenging year, giving me space when needed and pep talks to keep me focused on the end goal. I appreciate that you were my mentor and friend when I needed them both.

My committee members, Drs. Elise Cain, Sandra Ross, and Stefane Raulerson. I could not have picked a better committee of people to support me through the research of the female military population. The knowledge and support you provided me each step of the way was empowering. Dr. Cain, it felt like a hug whenever I read your feedback. Your dedication to supporting minority and nontraditional populations is inspiring, and there was no doubt you would be paramount to my success. Dr. Ross, your knowledge and recommendations helped my research become more impactful by creating more space for my diverse population. I appreciate your perspective and support. Finally, Dr. Raulerson, thank you for serving on my committee and for your continued support through my program. Your knowledge of veteran affairs made you essential to the success of this study.

I would also like to thank Dr. Juliann McBrayer. When we met as neighbors, you encouraged me to apply to the program because you said I would add a new perspective to the program, and higher education needed people with diverse backgrounds working with students. I would not be here today if it were not for you (and Bunco). Thank you sincerely for believing in me.

Dr. Georj Lewis, thank you for the opportunity to work with you as your graduate student. I would have never considered this research if it were not for the first project you gave me, which looked at other USG schools and where their military affairs offices reported. Our time together was short, but you gave me the opportunity and support to achieve great things. I look forward to being your Chief of Staff one day.

Finally, to the Dream Team. Brynn, Malerie, Brett, and LaRonda. Looking back over the past four years, the nights were long, but time has flown by. I love the friendships we created, the support we give to one another, and the memes that encourage self-loathing. You ladies have supported me through (many) jobs, moves, and life changes. I appreciate the love and encouragement and am grateful this program brought us together.

It's as simple as that.

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CHAPTER 1

INTRODUCTION

The enrollment of nontraditional students continues to rise as the typical post-high school student population experiences a decline (Anderson, 2021). Today's nontraditional student is over 25 years old, independent, has delayed their enrollment by one or more years, works full or part-time, has dependents, or is a first-generation college student (The Center for Law and Social Policy, 2015). The National Center for Education Statistics (NCES, n.d.) identified seven possible characteristics of a nontraditional student, which include: delayed enrollment (older than typical age), part-time enrollment, financial independence, full-time employment while enrolled, dependents, single parents, or GED recipient or certificate of completion. NCES ranks students from minimally nontraditional to highly nontraditional, depending on the number of factors present. Hittepole (2015) described nontraditional students' challenges as both people- and institutional-centered when entering college. This includes interrole or multi-role conflicts that balance employee, caregiver, and student responsibilities (Bean & Metzner, 1985). Additionally, they may experience isolation from their peers due to age, differing maturity levels, and experience (Grabowski et al., 2016). Finally, inflexible classes, lack of institutional offerings, or enrollment challenges such as part-time status (Taniguchi et al., 2005) can be barriers to success.

Within the nontraditional community, military-affiliated students are a special population. For this study, the term military-affiliated students include veterans, reservists, and those in the National Guard. A veteran has served in the active military, naval, or air service and was discharged or released under conditions other than dishonorable (National Archives and Records Administration, 2022). The reservists fill the gaps nationally when active duty forces are overseas. Those in the National Guard may assist with local emergencies such as natural

disasters, or deploy overseas. Both the Reserves and National Guard are required to participate in training drills one weekend a month and two weeks per year (Department of Veterans Affairs, 2012). Although they have very different experiences, some studies group reservists, National Guard members, active duty, and veteran into the term student service members/veterans (SSM/V) and look at the military-connected or military-affiliated population as a whole (Smith et al., 2017; Vest et al., 2020).

In addition to the typical nontraditional challenges, military-affiliated students are transitioning out of military life and acclimating to civilian and student life. Military-affiliated students face many obstacles, including a significant transition from structured military life to an autonomous student and civilian life; the lack of general knowledge of military-affiliated students' needs from university personnel and services; challenging institutional structures; lack of cultural, social, and professional support from faculty, staff, and peers (Griffin et al., 2015; Haecker, 2014); and mental or physical disabilities from deployment (Osborne, 2014).

A unique group within this subpopulation that is often overlooked, yet is one of the fastest-growing subgroups within the military, is females. Veteran Population Model 2018 (VetPop, 2018) is an actuarial projection model developed by the Office of the Actuary for Veteran population projection from Fiscal Year (FY) 2018 to FY2048. The official Veteran population projection as of 2018, September 30 is 19,541,961 total military personnel, with females making up 10% of the population (National Center for Veterans Analysis and Statistics, 2018). According to this data set, female personnel should reach 2,184,132, or 18% of the 12,236,295 total population, in 2048.

Additionally, a higher percentage of female military-affiliated students (28%) than male veterans (16%) in all age groups are enrolled in college (National Center for Veterans Analysis

and Statistics, 2013). While this population is steadily increasing, and women make up an estimated 27–31% of the total student veteran population (Postsecondary National Policy Institute, 2021; Student Veterans of America Research Department, 2021), little is known about their transition into and experience within higher education.

Female military-affiliated students bring challenges unique to nontraditional students and military-affiliated students – fulfilling the roles of caretaker, female, and service member – stacking the odds against persistence (Buckley, 2021). This merging of three identities is made more difficult by the issues and concerns from deployment, including female military-affiliated students who have expressed experience with military sexual trauma (Thomas, 2016), post-traumatic stress disorder (PTSD), and gendered identity challenges (DiRamio & Jarvis, 2011) during their deployment. In addition to the nontraditional student obligations, like fulfilling the roles of wife, mother, or caretaker, balancing childcare, and potentially work (Pellegrino & Hoggan, 2015), those responsibilities can make transitioning into the student role challenging. Further, the compounding effects of these challenges contribute to stress, injury, and depression rates that are over 2.3 times higher for women veterans leaving active duty than for male veterans (Thomas et al., 2016).

There is a need for ongoing development of policies, procedures, and resources to support female military-affiliated students' academic and social integration. Prior research shows peer and faculty interaction leads to positive social integration and decreased dropout among traditional students (Tinto, 1975). However, additional challenges of nontraditional students – like professional and family responsibilities– make peer and faculty interactions challenging (Hittepole, 2015; Markle, 2015). As a result, the risk of stop-out or dropout rate for nontraditional students is more significant than in the traditional student population (Paulsen &

Boeke, 2006). Tinto's Longitudinal Model of Dropout (1975, 1993) has been applied to other student types throughout the years, offering a better understanding of the student experience. As such, applying this model and theory to other student populations, like female military-affiliated students, can offer insights into the lived experience and needs of an underserved population.

Findings from this study build on the research conducted previously at the same institution, which looked at the influence of faculty interactions on peer group interactions for student veterans (Dean et al., 2020). Additionally, findings will add to the body of knowledge related to theories of persistence and address the gap in the persistence of female military-affiliated students and the influence of academic integration on their success. With an overall student veteran population of less than 4 % of all students, there is a need to highlight the unique needs and opportunities to support and facilitate the persistence of some women veterans (Vacchi et al., 2013). This research considers the compounding stressors of three different identities i.e., service member, student, and female, which come with distinct and various challenges that can prohibit a student from successfully integrating and persisting in college. Finally, recommendations for the responsibility of higher education leadership, which is integral to the efficiency and effectiveness of school resources and policies, will consider the diverse needs of this special population.

Background

This review of literature begins with an overview of Tinto's (1975, 1993) Institutional Departure Model, also known as the Student Integration Model. This model proposes that the degree of success a student has in their pursuit of higher education is influenced by the level of commitment a student has to an institution, academic goals, and career goals. Defining all characteristics and responsibilities of military-affiliated female students, is important as each

identity possesses its own challenges and advantages. Therefore, the review of literature begins broadly, describing the nontraditional student, the veteran, the military-affiliated female student, and the student veteran. Additionally, as Tinto's framework relies heavily on the student's interactions with faculty and peers to determine persistence, literature on faculty and peer interactions will also be reviewed. A more comprehensive review of these topics will be covered in chapter two.

Theoretical Framework

Tinto's original (1975) Longitudinal Model of Dropout identifies the parallel paths of academic and social integration that lead to a student's goal, institutional commitment, and, ultimately, college completion. Tinto's research found that either a low dedication to the student's completion goal or commitment to their institution could lead to dropout (1975). This means a student may be academically successful, yet unsuccessful in socially integrating, or integrating into the culture, yet failing to perform academically. According to Tinto, either of these situations may lead to student dropout. His early work mentions that an individual's academic integration can be measured in terms of both their grade performance and their intellectual development during the college years, with grade performance related more directly to the meeting of certain explicit standards of the academic system. They represent an extrinsic form of reward for the person's participation in the college. Tinto (1975) also notes that many studies have shown that grade performance has been the single most important factor in predicting college persistence.

Like Tinto's original 1975 work, most of the psychological and sociological student retention theories and models developed after 1970 have their roots in Durkheim's famous work, *Suicide* (Durkheim, 1951), including Schlossberg's theory of transition (1981), the Student-

Faculty Informal Contact Model (Pascarella, 1980), the Non-traditional Student Attrition Model (Bean & Metzner, 1985), and Tinto's 1993 revision of his seminal work. Tinto's (1993) student integration theory is the most widely cited retention theory. Tinto (1993) suggested three main conditions that need to be met to achieve student persistence: access to retention programs, retention programs must focus on all students, and retention programming that offers a degree of integration for students in both social and academic communities.

Tinto's 1993 model identifies different student groups, such as adult and transfer students, with unique experiences requiring group-specific interventions and policies. His updated model, revised over the three decades, describes the decision-making process concerning student goal commitment and dropout, the need to match student expectations to institutional mission, and the transitions of students moving through the college process (Swait, 2004). Previously to the 1993 version, Tinto's framework only identified a difference between male and female students regarding how dropout appears to be related to academic grade performance and intellectual development and found it affected these populations differently. The updated (1993) version identified different student groups, such as African American students, students from low-income families, adult students, and transfer students, with unique experiences requiring group-specific interventions and policies.

Nontraditional Students

A nontraditional student is defined as someone who is traditionally 24 years and older in addition to any of the following: is a first-generation student, has dependents, delayed college entry by one or more years, is enrolled part-time, is employed full-time, or does not have a high school diploma (Hittepole, 2015). In addition, Ellis (2019) reviewed research literature on nontraditional students finding the following characteristics of this population: they tend to have

more work responsibilities and less flexibility, availability, and family support. They are also commuters, so social or faculty interactions are limited to class time. Nontraditional students are typically at a different place in their lives than traditional students and bring a more mature mindset. As a result, nontraditional students seek more profound, meaningful answers and discussions from their classes (Ellis, 2019). For this demographic, college is not about the social experience, it is a bridge between theory and practice where they apply subject matter to their professional lives (Gilardi et al., 2011). Unfortunately, nontraditional students historically have a high attrition rate due to the complexities of their circumstances (Ellis, 2019). Due to schedules, age differences, and outside responsibilities, nontraditional students experience more difficulties and fewer opportunities to utilize university services, affecting their community and social integration (Gilardi et al., 2011). Considering the high attrition rate, it is important to identify early attrition and provide resources to combat stop-out or dropout before it happens.

The challenges of social integration for nontraditional students include fulfilling multiple roles (Markle, 2015), isolation between themselves and their peers, challenges with faculty (Hittepole, 2015), schedules (Markle, 2015), and culture (Hittepole, 2015). Filling multiple roles means meeting the needs of both a student and a parent, employee, and caretaker. The challenges with interrole status, and lack of institutional commitment when the student identity is one of many, can lead to withdrawal considerations (Markle, 2015). Nontraditional students also report isolation due to age differences between themselves and their peers (Hittepole, 2015). The challenges of nontraditional students in the classroom are not always related to themselves and their peers – they may also develop issues with faculty due to a lack of understanding of their role as more than just a student (Markle, 2015). Other challenges that impede social integration are limited class times (Markle, 2015), feeling “different” (Barnett, 2014, p. 129), and an

institutional culture that favors traditional students (Hittepole, 2015).

While research shows peer and faculty interaction leads to positive social integration and a decrease in student dropout in traditional students (Tinto, 1975), the additional challenges of nontraditional students – things like family and career responsibilities – make peer and faculty interactions challenging. As a result, nontraditional students' stop-out and dropout rates are higher than the traditional student population (Hittepole, 2015).

Student Veterans in Higher Education

Student veterans are a distinct population within the nontraditional student community with particular values and attitudes from their military experience. Veterans in higher education are a “unique population on the college campus” (Olsen et al., 2014, p. 101) who “add to the diversity of campus culture” (Norman et al., 2015, p. 702), yet have different academic and social needs than traditional students. With backgrounds and experiences unlike most of the general student population, the requirements of this subgroup are not always met (Olsen et al., 2014). Student veterans must balance their identities as both veterans *and* students, simultaneously addressing their needs and challenges. While student veterans find the skills they have acquired in the military an advantage in the classroom (Jones, 2013; Norman et al., 2015; Olsen et al., 2014; Pellegrino & Hoggan, 2015), they find it difficult to adjust to an environment that does not include the camaraderie (Olsen et al., 2014) or highly-structured setting (Kirchner, 2015) they are accustomed to.

In addition to general nontraditional student hurdles, additional challenges of military perceptions, faculty, policies, finances, and mental or physical disabilities affect student veterans and their social integration (Osborne, 2014). Thomas et al. (2015) found that women and racial/ethnic/sexual minority veterans have higher rates of poor outcomes related to the

reintegration issues mentioned above. Despite this, the student veteran completion rate is comparable to a nontraditional student completion rate of 50% (Norman et al., 2015).

One major issue affecting veteran students' social integration is the perception of having little in common with their undergraduate peers (DiRamio et al., 2008; Griffin et al., 2015). Many prefer to associate with other veterans (Vacchi et al., 2017). The presence of veterans on campus mimics the camaraderie they once felt in combat, influencing their identity and experience as students (Vacchi et al., 2017). Veterans feel isolated from their peers and struggle with not being supported by faculty and staff who do not understand the military culture (Haeker, 2014; Osborne, 2014). The research noted that veterans want faculty members to merely acknowledge their veteran status (DiRamio et al., 2008; Olsen et al., 2014), yet not use them as representatives of the military (Elliott, 2014) and may struggle with being the lone representative from the armed forces (Kirchner, 2015).

On a larger scale, some veterans do not feel like their university supports them due to a lack of infrastructure or resources (Griffin et al., 2015) or personnel who appear impatient when required to assist veterans in developing an education plan (Haeker, 2014). Navigating benefits and policies that lead to financial stress are two significant barriers to social integration among student veterans (Griffin et al., 2015). Delays in Veterans Affairs (VA) benefits can inhibit students from starting classes and cause financial stress on top of new general expenses from starting a civilian life (ASHE, 2011b). Not only can a delay in funding result in students scrambling to find funding until their benefits come in (Griffin et al., 2015), but for many students, this is the first time they are solely responsible for their finances (Olsen et al., 2014). Hawker (2014) found that credit transfers can be a source of contention for veterans transitioning from the field to the classroom. Additionally, a lack of understanding of the participants'

educational benefits and the veterans' benefits system is often a consistent obstacle. Many veterans identify getting course credit from their military experience as a barrier, as course credits are not the same across campuses (Griffin et al., 2015). However, research finds that while veterans can apply the course material, they are missing the foundations of the subject, therefore, unable to receive credit for that experience (Griffin et al., 2015).

Another significant barrier for student veterans is the aftermath of military participation. Mental and physical conditions may inhibit student veterans from fully integrating socially and academically. Elliot (2014) found that mental health issues profoundly impact student veterans successfully integrating into the college environment. In addition, physical disabilities can impede students' ability to participate in class (Elliot, 2014) or activities, while anxiety disorders like PTSD can influence relationships, a sense of belonging (Elliot, 2014), or persistence (Association for the Study of Higher Education [ASHE], 2011b).

Student veterans offer higher education professionals an opportunity to learn and interact with a population with different needs than traditional students. It requires faculty, staff, and institutions to research, understand, and adapt to a population of complex individuals with "multidimensional coconstructed identities" (Vacchi et al., 2017, p. 29). Like most nontraditional students, this demographic is typically older with financial responsibilities (Elliot, 2014), has a family (Olsen et al., 2014), and has higher expectations in and out of the classroom. Veterans may have additional mental or physical health concerns (Elliott, 2014) and experience trouble with connections to peers (Griffin et al., 2015; Olsen et al., 2014) due to the maturity levels of their classmates (ASHE, 2011b), suffer feelings of isolation and not fitting in (Griffin et al., 2015), and have trouble acclimating to a campus setting from a structured military environment (Griffin et al., 2015; Kitchener, 2015). Many attribute their success in the classroom to the

rigidity and accountability the military held them to (Pellegrino & Hoggan, 2015). Assisting veterans on a college campus can be difficult; however, many choose to blend in (ASHE, 2011a) or not self-identify (Griffin & Gilbert, 2015), making it problematic for faculty and staff to reach out and thus help them socially integrate.

Female Students Veterans

In addition to the general challenges of student veterans, female student veterans balance more identities and, with it, more challenges and barriers to persistence and academic success. The balancing act of female student veterans includes components of “work-life” balance, military woman, and reintegration (Disabled American Veterans [DAV], 2014). While an early seminal study found that when the military occupation is removed, and female student veterans must find a new vocation in a college or university setting, they face a unique identity crisis (Baechtold, 2009), a more recent study (Heitzman et al., 2015) found the opposite to be true. Heitzman found that balancing many roles can make them resilient. Their study showed that female student veterans had a solid perception of their capacity and intent to persist. Reintegration and transition, however, can be challenging for female student veterans. Other challenges female military-affiliated students may have during their transition are Post Traumatic Stress Disorder (PTSD) or military sexual trauma (MST) and gendered identities, complicated by the complex role of the mother or the primary caretaker upon return. One study found that female students with military experience were more likely to report that factors such as chronic pain, finances, and learning disabilities affected their academic performance (Albright, 2019). Baechtold (2009) mentioned that those who work with female veteran students must understand the transitions associated with moving from the role of an active military member to that of a civilian college student *and* gender identity issues to support this unique population fully.

Gender Differences in Transition for Veterans

While there is recent research on the subpopulation of female military-affiliated students and their transition from combat to campus, little is known regarding the differences between gender in the transition to civilian life (Association for the Study of Higher Education (ASHE), 2011c), and there are apparent gaps in the services provided to female veteran students (Albright, 2019). The literature provides general information on veteran transitions and the female experience individually, but little is looking at the transitional differences based on gender. An ASHE (2011) survey showed that female military-affiliated students did not identify different transitional needs from their male colleagues. While most research points to a disparity between men and women asking for help, where women have a higher tendency to ask for assistance than men (ASHE, 2011c), a 2015 study found that female college student veterans had similar attitudes toward help-seeking as their male counterparts (DiRamio et al.). However, they are less likely than male veterans to find same-gender role models (Baechtold, 2009).

Experiences and cultural norms of the military can affect interactions on campus. Military culture demands individualism and teamwork, and asking for help can be a weakness. This experience may carry over into campus culture, prohibiting women from seeking the assistance they need in and out of the classroom (ASHE, 2011c). Baechtold (2009) describes the process of basic training as one of depersonalization and deindividuation. The military instills in each person what it means to be a soldier and service member, an inherently male characteristic. Heineman's (2017) study on female military-affiliated students in community college found that not only did past gendered military experience keep them from socializing with non-veteran peers (due to lack of military knowledge), but also the reluctance to socialize with male veterans on campus due to the feelings of rejection and alienation while previously deployed. Baechtold

(2009) further states that female student veterans are closely tied to their identity in the military. Once that is removed, she is faced with the challenge of how to fulfill the role of student and their role as a woman. This is important because the relationships between students and their peers and faculty profoundly impact any student's education persistence.

There is a gap in the literature looking at the profound impact of those relationships on female student veterans, impacting their likelihood of persistence. There are substantial longitudinal studies on general veteran transition, but there is little empirical research on female military-affiliated students, despite the increasing number of females in the military. The complex layers of the female veteran student require academic and social support that may differ from the male veteran student, the nontraditional female student, and the traditional student. More research must be conducted to help identify barriers for female military-affiliated students as they transition to civilian and student life and make recommendations for practice to support faculty and staff in recognizing the unique needs of female student veterans.

Integration

For veteran and non-veteran students alike, faculty and peer interactions, as well as academic ability, are imperative to student integration (Vacchi et al., 2017). Tinto's original (1975) Longitudinal Model of Dropout identifies the parallel paths of academic and social integration that lead to a student's goal, institutional commitment, and, ultimately, college completion. Peer-group associations, extracurricular activities, faculty interactions, and academic success all aid in developing commitment to the institution (Tinto, 1975). Nontraditional students face challenges in and out of the classroom that can prohibit them from successfully integrating, such as part-time enrollment, schedules, fewer opportunities to utilize university services, age differences between themselves and peers, and time away from school, among other things

(Gilardi et al., 2011; Markle, 2015). Student veterans face many of the same challenges as nontraditional students, with the added challenge of pre-entry variables from the military rank or disabilities (Braxton, 2011), military sexual trauma (Thomas, 2016), Post Traumatic Stress (Jenner 2019), challenges with faculty (DiRamio et al., 2008; Olsen et al., 2014), or problems connecting with peers (DiRamio et al., 2008; Griffin et al., 2015; Olsen et al., 2014)

Persistence

Nontraditional students tend to have more work responsibilities and less flexibility, availability, and family support affecting their ability to persist (NCES, n.d.). Typically at a different place in their lives where the student identity isn't their primary identity, they bring a more mature mindset to their college experience. As a result, nontraditional students seek more profound, meaningful classroom experiences (Ellis, 2019) to earn a college degree (Barnett, 2014). Enrollment is a bridge between theory and practice, where they apply their subject matter and future careers (Gilardi et al., 2011); therefore, they have high expectations of themselves and their faculty (Barnett, 2014).

Student veterans are similar in their intent to persist. Research has found that the skills student veterans acquired in the military helped with their transition, commitment to academics, study habits, and organizational habits, leading to academic success (Camacho, 2021). Previous research found that veterans felt more comfortable in the presence of other veterans, providing support and encouragement to which they were accustomed (Vacchi et al., 2017), whether it is in an informal setting or through the institution's local chapter of the Student Veterans' Association, which helped lessen social isolation and increase social integration (Blaauw-Hara, 2016). The commitment to camaraderie and support is a characteristic student veterans continue

to honor on campus through academic support, particularly those who are in the early stages of transitioning from military service to higher education (Jenner, 2019).

Statement of the Problem

Military-affiliated students are a distinct population within the nontraditional student community who face additional challenges during the transition period to college. Military-affiliated students are either veterans transitioning out of military life and acclimating to civilian and student life, creating new identities throughout the process, or in the National Guard or Reserves where they are balancing the two identities. There is an even smaller - but growing - subset of female military-affiliated students within this subpopulation. As a minority in the military, this underrepresented population brings with them the ingrained gender roles and expectations of military life, which is then overlaid on both civilian and student identities. Female military-affiliated students may experience the challenges of male military-affiliated students during the transition process and share the same challenges as their servicemember female college peers, such as sexual trauma, domestic responsibilities, or childcare. The compounding stressors of three different identities (servicemember, student, and female) and the very distinct challenges associated with each make that transition from military to civilian student life difficult.

Purpose Statement

The purpose of this correlational study is to test the theory of Tinto's (1975, 1993) Institutional Departure Model that relates academic integration to college persistence, controlling for pre-entry attributes for female military-affiliated students at Great State University. The independent variables of interest: academic coaching or tutoring sessions, will be generally defined as academic integration. The dependent variables of stop out and dropout will generally

be defined as college persistence. Students are classified as stop out if their Fall 2022 classification is two or fewer years further than their semester of enrollment, and classified as dropout if their Fall 2022 classification has remained the same after three or more years. The control and intervening variables, age, race, and ethnicity will be defined as pre-entry attributes and statistically controlled in this study. This understanding will assist faculty and staff in identifying practices for quality programming for military-affiliated female students and provide higher education administrators with conceptually grounded research to guide decisions about policies, procedures, and resources to enhance the quality of female military-affiliated students' college experiences.

Research Questions

The main research question for this study is: *What is the relationship between academic integration and college persistence for female military-affiliated students in the southeastern United States?* The underlying or sub-questions of this primary inquiry include the following:

1. To what degree does academic integration mediate the relation between pre-entry attributes and college persistence among female military-affiliated students in the southeastern United States?
2. What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?

Significance of the Study

The significance of this research to the academic community is to add to the body of literature of military-affiliated students in higher education and advocate for female military-affiliated students through equity and inclusion in policies, practices, and resources. As the

enrollment of nontraditional students continues to rise, it is essential to identify and address the different needs of this special population to encourage and assist in their academic persistence. For this study, persistence is defined as returning in subsequent fall semesters. If a student's current status in Fall 2022 is further than it was during their initial enrollment, that student will have persisted. A more in-depth analysis of each cohort will be explained in chapter four. Additionally, female military-affiliated students' circumstances of military life, including Post Traumatic Stress Disorder (PTSD), military sexual trauma (MST), and gendered identities, are complicated by the complex role of the mother or primary caretaker upon return. These challenges compound the identified barriers for nontraditional students and military-affiliated students. The gap in the empirical literature on female military-affiliated students and their transition to higher education indicates a population of students whose needs are unmet or even considered.

As military-affiliated students must navigate two new roles as they join the college community, student and civilian, they need to find support and a sense of belonging from faculty and peers and servicemember-friendly policies and resources from the administration. Higher education can support female military-affiliated students through intentional academic and social programming by recognizing transitional issues for female military-affiliated students as one would for any high- or at-risk student.

Procedures

Research Design

The study will employ a quantitative framework using Tinto's (1975, 1993) Longitudinal Model of Dropout. This study is a follow-up to a pilot study conducted in the spring of 2020 (Dean et al., 2020). The pilot study looked at peer-group and faculty interactions of 87 veteran

undergraduate students at a comprehensive regional university in southeast Georgia. Using linear regression analysis, findings demonstrated that faculty interactions accounted for 23% of the variance in peer-group interactions. A limitation of the study was the non-random sample of participants, as all students contacted for this study were identified as student veterans at one university. Another limitation was the small sample size of 87 participants. Thus, the results were not generalizable to all student veteran populations. Recommendations for further research necessitated the need to identify if there are gender differences during the transition process for student veterans. As some of the women-focused literature showed, the gendered military experience had a lasting impact on their civilian life and how they socially and academically engage on campus (DiRamio & Jarvis, 2011; DiRamio et al., 2015; Heineman, 2017). In addition, additional demographic information, such as full- or part-time status, commuter or resident status, caregiver status, and grade point average, may help identify additional ways to increase relationships with female student veterans and faculty to lead to better peer-group interactions.

Data Collection

Before the study, the researcher obtained appropriate approvals from Great State University (GSU), a pseudonym, a Southeastern public four-year research institution (Carnegie Classification: Research University – high research activity [RU/H]). The researcher sent a letter of cooperation to the Division of Enrollment Management (Appendix A). The second was sent to the Institutional Review Board. The longitudinal data for this study was obtained from Great State University's Office of Institutional Research through a data sharing initiative between the College of Education and Enrollment Management. The Office of Institutional Research pulled

the data directly from the Banner student information system (SIS) and de-identified the records to protect student privacy.

The data provided to the researcher consisted of five years of data of military affiliated students enrolled in the fall 2018 semester through the fall 2022 semester at Great State University. The data provided include variables from the student information system as well as EAB Navigate, a student success management system, and the student admission applications. Data from the Banner SIS include: *Number of times changed majors; Time to a degree (how many years until degree conferred); Final Major; Number of times on academic probation; Year in school (graduated or still active)*. Data initially captured on the admissions application and currently stored in Banner SIS includes: *Legal sex; Age based on date of birth; Ethnicity; Race; and Reserves status*. Additionally, military benefits used were certified by the Office of Military and Veteran Services and stored in Banner SIS. Use of student success center resources/tutoring data are based on participation rates in EAB Navigate.

Setting

The setting for this research will take place from the fall semester in 2018 to the fall semester of 2022 at Great State University in the southeast United States. The Division of Enrollment Management provided a data set of all military-affiliated students using the Montgomery GI Bill (Chapter 30), Vocational Rehabilitation benefits (Chapter 31), or Post 9/11 GI Bill (Chapter 33) benefits from Fall 2018 to Fall 2022. Participants included in this data set will only be those with prior military experience; it will not include any military dependents.

Participants

This quantitative study will use a purposive sample of past and current university students with prior or current military experience from GSU. For this research, the Division of

Enrollment Management prepared a report for military-affiliated students who utilized military benefits from Fall 2018 to Fall 2022. Military-affiliated students who were either active or former active duty, reservists or retired were included in this data set. Additionally, all military branches were included in the data set. Female students who have served in the U.S. Armed Forces are the focus for this study.

Data Analysis

The initial plan to conduct an SEM analysis to test mediation was abandoned in lieu of a series of binary logistic regressions due to computational difficulties in estimating SEM parameters using categorical/dichotomous variables. In these regressions, age and military branch served as exogenous predictors of academic coaching and tutoring, which both served as mediators in all models. The covariate-adjusted odds-ratio (CAOR) was employed as the measure of the effect of any given predictor on the outcomes.

For both dropout and stop out, the “yes” category was used as the referent category. For ethnicity (RQ1) as a categorical predictor, white was employed as the referent category and for military branch as a categorical predictor (RQ2), “veterans who did not claim a given branch” was used as the referent category.

The overarching research question, *What is the relationship between academic integration and educational persistence for female military-affiliated students in the southeastern United States?* will be answered by observed and latent variables. Our two dependent variables of interest, faculty interactions and interactions with peers, measure the quality of students’ interactions with key relationships. The variables we cannot see or directly measure that we want to know about are referred to as latent or hidden variables.

RQ 1, *To what degree does academic integration mediate the relation between pre-entry attributes and college persistence among female military-affiliated students in the southeastern United States?* will be answered by identifying any effects of persistence based on academic integration.

RQ 2, *What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?* will be answered using an independent samples t-test.

Limitations, Delimitations, and Assumptions

One limitation of this study will be the non-random sample of participants. All students included in this study met the defined criteria of serving or still serving in the military and utilizing Veterans Affairs benefits. Thus, the results are not generalizable to all military-affiliated veteran populations. Therefore, because the study consisted of a census rather than random selection and delimited to the nontraditional military-affiliated veteran population at a public, four-year, research institution, the study findings are not generalizable to all student veteran populations or general nontraditional student populations.

This study assumes that the sample will represent the total population of female military-affiliated veterans at Great State University. Additionally, another assumption is that all participants in the study will answer all the survey questions openly and honestly.

Definition of Key Terms

Active Duty – Active duty is full-time duty in the active military service of the United States, including active duty or full-time training duty in the Reserve Component (Department of Defense, 2020).

Campus Veterans' Office – assist eligible veteran students in understanding their educational benefits, provide guidance on procedural requirements, and certify, register and report enrollments to the VA to ensure that veterans receive their benefits in a timely manner. (The Office of Veteran & Military Affairs, n.d.)

Dropout – A student who drops out is a person who has left school before graduating or earning a credential (Schmidtke, 2016).

Grade Point Average (GPA) – The quantification of an individual student's grades in for-credit courses. Each grade is assigned a numerical value and the number of credit hours assigned to the course is calculated to determine the student's academic progress. Most commonly, the numeric scale ranges from 0.00-4.00 (Great Schools Partnership, 2013).

Gendered Military Identity – Gendered military identity... deny all that is feminine and soft in him or herself to successfully embrace the traditional role of a military soldier (Goldstein, 2009).

Green Zone (GZ) – A Green Zone (GZ) program is a visible network of faculty and staff in all schools/colleges and administrative units to which student veterans could receive assistance. A key component of the GZ program is to ensure that volunteers have basic knowledge and understanding of the challenges faced by student veterans and information about the resources available on campus and in the community to assist them (Nichols-Casebolt, 2012).

Institution of Higher Education – The institution of higher education is a facility, either the traditional brick-and-mortar or virtual, that provides educational coursework beyond secondary education. This may include community colleges, universities, technical schools, or professional schools.

Latent construct – Latent constructs are theoretical; they cannot be observed directly and therefore cannot be measured directly either (Garger, 2020).

Military-affiliated Students - For this study, military-affiliated students include veterans, Reservists, and those in the National Guard.

Military Sexual Trauma (MST) – Military sexual trauma is defined as sexual assault or harassment experienced during military service. MST includes any sexual activity that someone is involved with against their will. Examples include but are not limited to: being pressured or coerced into sexual activities, such as with threats of negative treatment if refusal to cooperate or with promises of better treatment in exchange for sex; someone having sexual contact with a person without their consent; repeated comments about the body or sexual activities; or threatening and unwanted sexual advances (U.S. Department of Veterans Affairs, 2010).

The Montgomery GI Bill® - The Montgomery GI Bill is an Active Duty Educational Assistance Program, also known as MGIB-AD or Chapter 30, that provides education benefits to Veterans and Service members who have at least two years of active duty.

Non-traditional Student – A non-traditional student is anyone who is over 25 years old, independent, has delayed their enrollment by one or more years, works full- or part-time, has dependents, or is a first-generation student (The Center for Law and Social Policy, 2015).

Persistence: Persistence is the continued enrollment (or degree completion) at any higher education institution — including one different from the institution of initial enrollment — in the fall terms of a student's first and second year (NSC Research Center, 2019).

Post 9/11 G.I. Bill –The Post 9/11 G.I. Bill stipulates that those who have served on active duty after September 10, 2001, may qualify for the Post-9/11 GI Bill (Chapter 33) benefits such as tuition and fees, and money for housing, books, supplies, and relocation (Department of Veterans Affairs, 2020). The bill provides for 36 months of tuition and fees equal to the most expensive in-state tuition at a public college in the state where the veteran chooses to enroll. Benefits also include a yearly \$1,000 stipend for books and supplies, and a monthly living allowance (Disabled American Veterans (DAV), 2014).

Post Traumatic Stress Disorder – (*PTSD* – Post-traumatic stress disorder (PTSD) is a mental health condition that's triggered by a terrifying event — either experiencing it or witnessing it. Symptoms may include flashbacks, nightmares, and severe anxiety, as well as uncontrollable thoughts about the event (Mayo Clinic, 2018).

Retention – Retention is the continued enrollment (or degree completion) within the same higher education institution in the fall terms of a student's first and second year (NSC Research Center, 2019).

Stop-out – Stop-out students are students who have left the university prior to completing their degree but with the intention to return in a later semester (Quezada et al, 2017).

Transition – A transition is any event, or nonevent, which results in changed relationships, routines, assumptions, and roles. (Schlossberg, et al., 1995, p. 27).

University System of Georgia – The University System of Georgia (USG) is a part of the community in each of Georgia's 159 counties and provides services across the state. The USG is composed of 26 higher education institutions including four research universities, four comprehensive universities, nine state universities, and nine state colleges. It also includes the Georgia Public Library Service (University System of Georgia, 2022).

Veteran – A veteran is a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonorable (Office of the Federal Register, & Government Publishing Office, 2020).

Vocational Rehabilitation – Vocational Rehabilitation, also known as Chapter 31 benefits, provides assistance to veterans who have a service-connected disability of at least 10 percent and are in need of vocational rehabilitation. Vocational rehab covers a student's tuition and fees, books, school supplies and also pays a monthly housing allowance.

Summary

As Tinto's (1975, 1993) theory states, a student's potential for dropout is derived from their long-term academic and social interactions on campus. For academic and social integration and persistence to happen, nontraditional and student veterans need to find support and a sense of belonging from faculty and peers. For nontraditional students, significant barriers to integration, such as acceptance and understanding from faculty members, serving dual roles, and relating to peers, can strongly influence the nontraditional student's decision to participate in the college experience. In addition to standard nontraditional challenges, student veterans face challenges of bureaucracy, isolation, and misunderstanding during their time of transition. However, this study seeks to delve further into the female military-affiliated student transition process and the intent to persist. The barriers of each of the three identities separately: the work-school-life balance of a non-traditional student, expectations of child rearing or caretaking, and reintegration introduces challenges not experienced by their male counterparts. Nevertheless, research shows that intentional efforts towards student veterans can result in a sense of belonging and successfully integrating this unique population of nontraditional students. Therefore, the question exists as to what steps higher education institutions can take to support female student veterans. A concerted

effort needs to create an environment designed to assist with their transition and integration to campus and an inclusive atmosphere to support their unique situations and support degree completion.

CHAPTER 2

LITERATURE REVIEW

This chapter presents a review of literature from the broad topic of nontraditional students, to the very specific needs and characteristics of female student veterans. While the field of female veteran-specific research is growing, understanding the compounding challenges of this dynamic student through their different identities is necessary to support them in their academic endeavors. The chapter begins with examining who the nontraditional, veteran, and female military-affiliated students are, followed by the theoretical framework for this study, Tinto's (1975, 1993) Institutional Departure Model, also known as the Student Integration Model. This model proposes to explain the process of student dropout or persistence, and even to anticipate such events based on the parallel experiences of their social and academic integration. Additionally, Tinto's model explains the variety of pre-entry attributes such as sex, race, and ability, as well as precollege experiences such as grade-point averages, and academic and social attainments, have direct and indirect impacts upon performance in college for individuals entering higher education institutions. Throughout this review of literature, these pre-entry attributes will be discussed at each level of the student experience: nontraditional, veteran, and female.

Tinto's framework relies heavily on the parallel journeys of a student's interactions with faculty and peers (social integration) and their academic performance (academic integration) to determine persistence. Despite the increase of recent literature on the veteran experience, there is still a gap in the literature on the female student veteran perspective. Because of this, the literature review will also address other topics that are tangentially related and will help inform the study. This includes reviewing the literature on the individual identities the female student

veteran embodies, beginning with the nontraditional student perspective through the veteran experience, and finally, the female perspective. Additionally, the intersectionality of the three identities and their impact on educational success will be reviewed. Finally, this chapter will present a review of academic persistence for veteran and female veteran students.

Nontraditional Students

It would be remiss not to mention the current discussion in higher education regarding the term “nontraditional student.” Cross (1981) first coined the term “nontraditional student” to refer primarily to *adult students who returned to school while also maintaining family and employment-related responsibilities*. Since then, “nontraditional” has expanded to include non-degree, commuter, veteran/military, senior citizen, and online/distance education and more. The issue using nontraditional as a catch-all for a large population, is assuming homogeneity in regards to needs and support for a very diverse population. As of recent, the term “post-traditional learner” has replaced the nomenclature “nontraditional” in the literature (Bruce-Sanford et al., 2019), but still encompasses those who embody the historical parameters of a nontraditional student. With roughly 85% of students not falling within the “traditional” undergraduate definition (Postsecondary National Policy Institute, 2021), the term nontraditional does not accurately depict this population, nor does it recognize the added value they bring to a campus. For the purposes of this study, nontraditional and post-traditional are synonymous, as characteristics of both groups contain significant overlap.

Nontraditional students experience challenges that are both people- and institutional-centered during their college experience (Hittepole, 2015). People-centered challenges include those relationships both in and out of the classroom such as balancing employee, caregiver, and student responsibilities (Bean & Metzner, 1985) and relationships with peers (Gilardi et al.,

2011). Nontraditional students may experience isolation from their peers due to age, differing maturity levels, and life experiences (Grabowski et al., 2016). Today's nontraditional student is dynamic and can have any of the seven characteristics identified by The National Center for Education Statistics (n.d.) to be considered nontraditional. Students are ranked from minimally nontraditional to highly nontraditional, depending on the number of factors present. This includes being a single parent, having dependents, being a GED recipient or having a certification of completion, delaying enrollment beyond the traditional age, being financially independent, working full-time, or part-time enrollment. Institutional challenges include academic and operational issues, including class schedules that do not support working adults, enrollment challenges for part-time students, and a lack of knowledge or institutional offerings for adult learners (Taniguchi et al., 2005). Knowing and understanding the nontraditional student is imperative as institutions experience an increase in enrollment of this population (Anderson, 2021).

National Guard and Reservist Students

Students who are in the Reserves or National Guard can be enrolled in school while simultaneously fulfilling their military obligations. The requirements of participating in training drills one weekend a month and two weeks per year (Department of Veterans Affairs, 2012) can be completed while being enrolled full- or part-time. The educational experiences for those in the Reserves or National Guard, as they may be called to duty at any time; therefore, their experiences are different even from a student veteran. Unlike student veterans, who may have families or jobs, and therefore may take longer to complete a bachelors degree, members of the Reserves or National Guard can begin their education as soon as their basic training has been completed (Molina et al., 2017). As a result, National Guard or Reserve members are often

traditional aged (Bonar et al., 2011; Molina et al., 2017). Their academic and social experiences may be greatly impacted by their training for deployments (Bonar et al., 2011). Recent wars like Operation Iraqi Freedom and Operation Enduring Freedom relied heavily on a large percentage of activated National Guard and Reserve units, resulting in many at risk of not completing their college education as planned (Hammond, 2017).

Student Veterans

A veteran has served in the active military, naval, or air service and was discharged or released under conditions other than dishonorable (National Archives and Records Administration, 2022). They bring with them attributes different from not only traditional students, but nontraditional students as well. Their identity is layered – while most are between ages of 24 and 40, and nearly half are married and/or have children, only 15% are traditionally college-aged (Cate et al., 2016). They arrive with a background that includes knowledge, skills, and codes of behavior not experienced by civilians (McCaslin, 2013). Despite the commonalities of serving in the armed forces, veterans are not a homogeneous group (Camacho, 2021; Vest et al., 2022); therefore, their transitions into higher education vary based on social identities such as race, sexual orientation, and gender, pre-entry variables such as first-generation status, rank, socioeconomic status, and disability (Braxton, 2011), educational experiences, and their ability to balance external obligations and responsibilities (Camacho, 2021).

Due to their experiences, veterans face both people- and institutional-centered challenges and additional personal challenges unique to their lived experiences, resulting in their needs not always being met (Olsen et al., 2014). Veterans in higher education are distinguished from the nontraditional community and described as a unique population (Olsen et al., 2014) who “add to the diversity of campus culture” (Norman et al., 2015, p. 702) and have an experience that few of

their civilian peers can relate to what to (Baechtold, 2009). Student veterans are not only transitioning out of military life and acclimating that lacks the camaraderie (Olsen et al., 2014) or highly-structured setting (Kirchner, 2015) they are accustomed to, but also embarking on a new identity as a student. They must balance their identities as both veterans *and* students, simultaneously managing the needs of being an adult learner and recognizing the challenges from deployment (Osborne, 2014). Having already experienced the “benchmarks” of integrating into the military, which is hierarchical, physical, and demanding, student veterans go through the same sort of integration, starting at the bottom, but in a significantly different way focusing on independence and establishing an identity (Baechtold, 2009).

On a personal level, many factors can influence the transitional period and their acclimation into the campus community, including the amount of time between discharge and entry into college, the differences between military and civilian culture, and psychological consequences (McCaslin, 2013; Osborne, 2014). The transition from the military culture, which focuses on service, camaraderie, structure, and respect (McCaslin, 2013), can be jarring when stepping onto a college campus that supports free thinking and autonomy, where previously, purpose and decision-making were decided by an external authority (Braxton, 2011). Additional challenges include the military perceptions from the college community, relationships with faculty, policies, finances, and mental or physical disabilities affecting student veterans and their integration (Osborne, 2014).

Student veterans also experience institutional challenges like a lack of academic, personal, or professional resources (Griffin et al., 2015). Higher education institutions tend to be structured to cater to younger, traditional students, and as a result, colleges and their courses and resources tend to minimize adult learners’ prior knowledge, circumstances, and experiences

(Blaauw-Hara, 2016). Additionally, student veterans experience a lack of cultural, social, and professional support from faculty, staff, and peers, and a lack of general knowledge of veterans' needs from university personnel and services (Griffin et al., 2015; Haecker, 2014). Challenges like dealing with staff who appear impatient when required to assist veterans in developing an education plan (Haecker, 2014) can create feelings of hostility towards veteran students.

Additionally, significant barriers that create undue stress include navigating benefits (Griffin et al., 2015). For example, financial stress and problems registering for classes can be caused by delays by VA benefits (ASHE, 2011b), resulting in students scrambling to find funding until their benefits come in (Griffin et al., 2015). For many students, this is the first time they are solely responsible for their finances (McCaslin, 2013; Olsen et al., 2014), housing, or healthcare (McCaslin, 2013). Research has found that financial difficulties are present for student veterans and can serve as a catalyst for them to leave their programs of study despite the financial benefits granted by the G.I. Bill, (DiRamio et al., 2008; Wheeler, 2012) due to the rising cost of tuition at both public and private institutions.

Credit transfers can be a source of contention for veterans starting school (Hawker, 2014) due to a lack of understanding of the participants' educational benefits. Like other adult learners, student veterans possess skills acquired and identities from their professional lives, which provide them an advantage in the classroom (Jones, 2013; Norman et al., 2015; Olsen et al., 2014; Pellegrino & Hoggan, 2015). However, many student veterans find receiving course credit from their military experience challenging, as course credits do not transfer consistently across campuses or institutions (Griffin et al., 2015). Additionally, there is a gap in education from when the student veteran graduated high school to college enrollment. Students who did not receive preparation in academic organizational skills earlier in their educational journeys may be

at a disadvantage as they struggle to manage their responsibilities as a professional and a student (Camacho, 2021). Jenner (2019) found the break in education experience resulted in anxiety about coursework, often accompanied by worry about educational technology (Camacho, 2021; Jenner, 2019). Another challenge for student veterans is that while they excel in the application of a subject matter, they are missing the foundations of the subject, and, therefore, unable to receive credit for that experience (Griffin et al., 2015). Additionally, there is a feeling of inadequacy as student veterans compare their performance to other, more traditional, students (Jenner, 2019). The challenges student veterans face span policies, procedures, and personnel, and while there is no one component to blame, they report many difficulties transitioning into college and identify personnel and services as the most important element to a successful transition (Griffin et al., 2015).

Another significant barrier for student veterans is the aftermath of military participation. Mental and physical conditions like memory loss, Traumatic Brain Injury (TBI), and Post-Traumatic Stress (Jenner 2019), may inhibit student veterans from fully integrating socially and academically. Elliot (2014) found that mental health issues profoundly impact student veterans' successfully integrating into the college environment. In addition, physical disabilities such as cognitive disorders due to blast-related traumatic brain injury (McCaslin, 2013) can impede students' ability to participate in class (Elliot, 2014) or activities, while anxiety disorders like PTSD (McCaslin, 2013) can influence relationships, a sense of belonging (Elliot, 2014), or persistence (ASHE, 2011b). All of these conditions may necessitate academic accommodations (Jenner, 2019), further exacerbating the disconnect between student veterans and their peers.

Student veterans are similar to nontraditional students as they have life experiences and greater knowledge of the world (Blaauw-Hara, 2016), resulting in higher expectations in the

classroom, and are usually older than their traditional student counterparts with families (McCaslin, 2013; Olsen et al., 2014) and financial responsibilities (Elliot, 2014). As a result, they may experience trouble with connections to peers (Griffin et al., 2015; Olsen et al., 2014) due to the age and maturity levels of their classmates (ASHE, 2011b). Student veterans may experience other challenges due to their time in the service. They may suffer feelings of isolation and not fitting in (Griffin et al., 2015), experience mental or physical health concerns (Elliott, 2014), or have trouble acclimating to a campus setting from a structured military environment (Camacho, 2021; Griffin et al., 2015; Kitchener, 2015). Student veterans may find the opportunity to think for themselves and make decisions troubling, as decision-making in the military involves following the rules that were supported by outside forces; however, self-regulation is key to a successful transition for college students (Braxton, 2011).

Veterans pursuing their master's degrees attributed their success in the classroom to the strategies (Camacho, 2021), rigidity, and accountability the military held them to (Pellegrino & Hoggan, 2015) and felt capable of succeeding in the classroom because they had been successful in their military career, regardless of previous challenges or difficulties (Vance, 2015). Despite overcoming challenges in and out of the classroom, the student veteran completion rate is 50%, comparable to a nontraditional student completion rate (Norman et al., 2015). Camacho's (2021) findings indicated that student veterans often attributed the skills and values learned in the military, such as technical skills, discipline, and learning from failure not only helped them transition to college. Atkinson et al.'s (2018) research found female veteran engineering students' time in the military shaped their educational careers through skills like the ability to work within time constraints, confidence, maturity, and very specific skills to be highly successful in their program.

Student veterans are highly motivated and describe their transition to higher education as part of their next “mission” (Camacho, 2021), whether it is an assignment, class, or degree (Blaauw-Hara, 2016). Their military experience generates unique definitions of success and motivations for pursuing higher education. Although academic achievement and degree completion are important to veterans, the importance of these items is often anchored in a deeper understanding of personal success and occupational development (Jenner, 2019). However, as their expectations of higher education differ from their classmates, they will become unmotivated if they feel their time is wasted or they are forced to pursue academic objectives that do not make sense to them (Vance, 2015). One student veteran described the military's role in motivating him to succeed in college. “We’re here to do the work, to get our grades, and to get our degrees; not necessarily to have fun . . . our goals aren’t to get the college experience, it’s to get an education” (Camacho, 2021, p. 9). Veterans enter college with skills and mindsets that set them up for success rather than failure (Blaauw-Hara, 2016).

Durdella et al. (2012) found that despite having higher levels of academic participation, academic time, and collaborative work compared to their nonveteran classmates, student veterans reported lower college GPAs (Grade Point Average) and lower levels of sense of belonging. Additionally, the study found higher levels of work employment, lower levels of income, and lower levels of freshman status (enrolling as a transfer), resulting in negative social and academic integration.

Sansone’s (2020) study looked at student veteran transfer outcomes, and found, in general, student veterans have higher odds of experiencing a stop-out as time progresses.

The motivation of student veterans provides faculty and staff an opportunity to research, understand, and adapt to a population of complex individuals with different needs and values

than traditional students. Assisting veterans on a college campus can be challenging, as some choose not to self-identify (Griffin et al., 2015) for many reasons, making it problematic for faculty and staff to reach out and thus help them integrate. However, as Tinto's research shows, the student-faculty relationship is imperative to support a student's social integration.

The Female Student Veteran

The female veteran identity is unlike the nontraditional or male student veteran. Despite being one of the fastest-growing subgroups within the military, it is a population often overlooked. With females making up 10% of the veteran population (National Center for Veterans Analysis and Statistics, 2018), and their exposure to the stresses of war increasing as their location in combat zones has changed (Baechtold, 2009), their transition from military to civilian life requires making a connection between what they experienced during their military service and how they make meaning of their experiences as college students (Baechtold, 2009). Making up an estimated 27–31% of the total student veteran population (Postsecondary National Policy Institute, 2021; Student Veterans of America Research Department, 2021), little is known about their pre-entry attributes and how they affect their transition and experience in higher education as a civilian, veteran, female, and student. The increase in the number of women enrolling in college following their tour of duty suggests faculty and staff need to make concerted efforts to be able to support female student veterans by being aware of how issues associated with mental health, sexual assault, and gender identity may influence how they transition into the campus community (Baechtold, 2009).

In addition to the general challenges of student veterans, female student veterans balance more identities, including being female as well as oftentimes the identities of a mother or caretaker, and, with it, more challenges and barriers to persistence and academic success

(Buckley, 2021). Additionally, a higher percentage of female veterans are divorced compared with male counterparts and are more likely to be separated than women non-veterans (Garasky, 2016; National Center for Veterans Analysis and Statistics, 2016). The amount and types of stress that female student veterans face as they transition are often intensified as they support their family members, emotionally or financially (Atkinson et al., 2022). Child care can also present challenges for women veterans and servicemembers both during deployment and after. Due to time restrictions on GI Bill educational funding, those who enroll in college immediately following deployment continue to have a concern with not only finding childcare (Hamrick et al., 2012), but affordable childcare (Pellegrino, 2015). The balancing act of female student veterans includes components of “work-life” balance, military woman, and reintegration (Disabled American Veterans [DAV], 2014) made difficult by the issues or trauma experienced from deployments, such as military sexual trauma (Thomas, 2016), post-traumatic stress disorder (PTSD), and gendered identity challenges (DiRamio & Jarvis, 2011). While sharing some of the challenges of a nontraditional student, and the additional experiences of someone who has served in the military, those challenges can make transitioning into the student role challenging. Further, the compounding effects of these challenges contribute to stress, injury, and depression rates that are over 2.3 times higher for women veterans leaving active duty than for male veterans (Thomas et al., 2015).

Previous research has produced conflicting results indicating that females have both experienced and not experienced trouble while transitioning and acclimating to civilian student life. Baechtold (2009) found female student veterans face a unique identity crisis when the military occupation is removed, and they are forced to redefine who they are as a civilian, veteran, and student. Once they re-enter civilian life, they are often unsure how to fulfill their

specific role as a student and their role as a woman” (Baechtold, 2009, p. 40). This is significant because the relationships that students have with their peers and faculty have a crucial impact on education persistence. Heitzman et al. (2015), however, found balancing many roles can make female student veterans more resilient. Their study showed that female student veterans had a solid perception of their capacity and intent to persist. Reintegration and transition can be challenging for female student veterans for other reasons, including Post Traumatic Stress Disorder (PTSD), military sexual trauma (MST), or gendered identities issues, which add to the complex role of mother or caretaker. One study found that female students with military experience were more likely to report that factors such as chronic pain, finances, and learning disabilities affected their academic performance (Albright, 2019).

Baechtold (2009) mentioned that those who work with female veteran students must understand the transitions associated with moving from the role of an active military member to that of a civilian college student *and* gender identity issues to support this unique population fully. Veterans, both male and female, experience barriers such as mental and physical health, social connection, and identity management (Sullivan et al., 2020). There is a need for ongoing development of policies, procedures, and resources to support female student veterans' academic and social integration, yet college administrators and staff should develop awareness about the needs of women veterans and servicemembers on their own campus without stereotyping or minimizing their military service (Hamrick, 2012).

Female Military-Affiliated Students of Color

Forty-six percent of all women servicemembers are people of color, while 58% of women in the Army and 53% of women in the Army Reserve are people of color (Government Accountability Office, 2005). Thomas et al. (2015) found that women and racial/ethnic/sexual

minority veterans have higher rates of poor outcomes related to the reintegration issues such as connecting socially and finding their place as civilians. Foyne et al. (2013) looked at the intersection of race-based discrimination and gender-based discrimination to see if women of color experience higher levels of either against White women, White men, and men of color. Research found while women of color did not report the highest levels of discrimination relative to other groups, people of color experienced higher levels of both forms of discrimination. Additionally, their study found that women who experienced high levels of gender-based discrimination reported the highest levels of anxiety. Muralidharan et al. (2016) found similar results related to anxiety, where Black and Hispanic women reported greater anxiety symptoms compared to White women. Sansone's (2020) findings indicated transfer students whose ethnic background was Latina/o had a 21% lower chance of stopping out within four academic years than their White peers. However, being a Black/African American woman who was over the age of 23 at enrollment increased the likelihood of stop-out. Sansone's study also looked at graduation rates and found veteran status alone was not associated with stop out or dropout as much as ethnicity was (2020). Spont et al. (2021) found not only was the mental health burden of PTSD among racial and ethnic minority veterans was greater than among their White peers, but also Black/African and Hispanic veterans were less likely to show significant improvement six months after diagnosis than their White peers.

Gender Differences in Transition for Veterans

While there is recent research on female military-affiliated students and their transition from combat to campus, very little is known regarding the differences between gender and the transition to civilian life (ASHE, 2011c), and there are apparent gaps in the services provided to female veteran students (Albright, 2019). The literature provides general information on veteran

transitions and the female experience individually, but little attention is paid to transitional differences based on gender. Although one survey found, female military-affiliated students did not indicate that they had different transitional needs from their male colleagues (ASHE, 2011a).

DiRamio et al.'s (2015) study found that female college student veterans had similar attitudes toward help-seeking as their male counterparts. However, most research points to a disparity between men and women asking for help, where women have a higher tendency to ask for assistance than men (ASHE, 2011c). Baechtold (2009) found the gendered identity issues had an impact on help-seeking and resulted in female military-affiliated students less likely to allow others, especially men, to help them, even when necessary, for fear of appearing weak – tendencies from the service they bring with them to campus. Military culture demands individualism and teamwork, and asking for help can be a weakness. Additionally, research has found that female student veterans have expressed more difficulty with on-campus engagement because of previous experiences in the military that exhibit the male-dominated military culture (Ackerman et al., 2009; Baechtold, et al., 2009; DiRamio et al., 2015; Osborne, 2014; Schiavone, et al., 2014). This hypermasculine military culture characterized by strict hierarchy and implicit misogyny (Finlay, 2007) and expresses power through domination or humiliation of the weaker "other," including women (Finlay, 2007). These difficulties may carry over to their college campus culture, preventing females from seeking the assistance they need not only in the classroom but beyond it as well (ASHE, 2011c). Baechtold (2009) describes the process of basic training as one of depersonalization and deindividuation. The military instills what it means to be a soldier, a service member, and other inherently male characteristics - removing females' feminine identity. Heineman's (2017) study on female military-affiliated students in community college found that not only did prior gendered military experience keep them from socializing

with non-veteran peers (due to lack of military knowledge), but also the reluctance to socialize with male veterans on campus due to the feelings of rejection and alienation while previously deployed. Additionally, female student veterans are less likely than male veterans to find same-gender role models (Baechtold, 2009).

There is a gap in the literature regarding the profound impact of those relationships on female student veterans and their likelihood of persistence. Despite the increasing number of females in the military, there has been minimal empirical research on female military-affiliated students. The complex layers of the female veteran student necessitate academic and social support that differs from that of the male veteran student, the nontraditional female student and other student populations. More research must be conducted to help identify barriers for female military-affiliated students as they transition to civilian and student life and make recommendations for practice to support faculty and staff in recognizing the unique needs of female student veterans.

Theoretical Framework

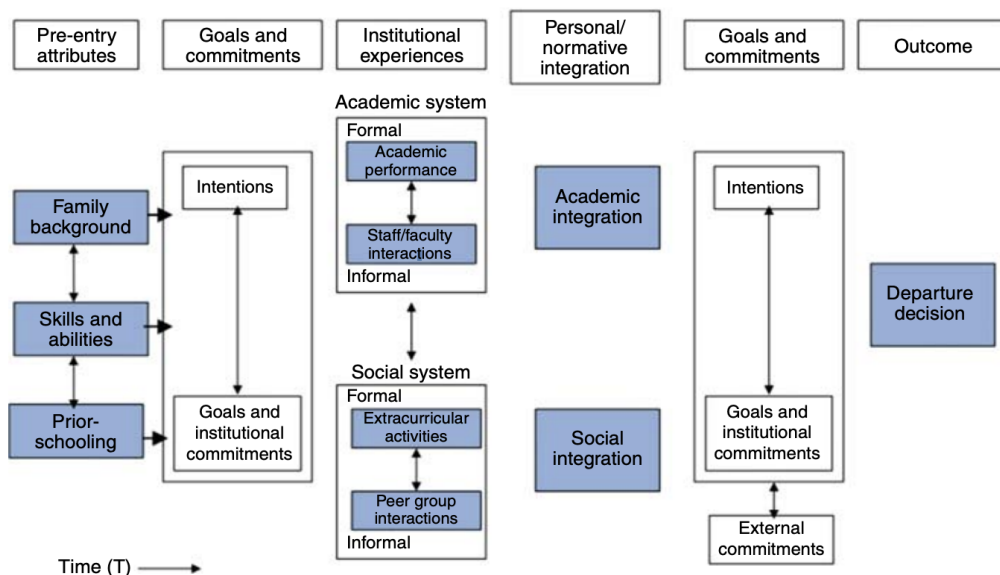
Tinto's original (1975) Longitudinal Model of Dropout identifies the parallel paths of academic and social integration that lead to a student's goal, institutional commitment, and, ultimately, college completion, based on Tinto and Cullen's 1973 report. This report, published for the U.S. Office of Education and funded by the U.S. Department of Education's Office of Planning, Budgeting, and Evaluation (OPBE), explored factors affecting college student dropout. The report named three main goals: (1) to determine if dropout was related to social status and individual ability; (2) to determine if any change had occurred in dropout rates since a persistence model was developed in 1965 by the U.S. Office of Education; and (3) to pursue the development of a theoretical model to explain dropout. When reviewing previous research on

dropout, they found social status and academic ability as predictors of student dropout or persistence but concluded that ability was the main predictor of returning to college for a second year (Tinto et al., 1973). The result of this research was Tinto's initial Longitudinal Model of Dropout. Like Tinto's 1975 work, most of the psychological and sociological student retention theories and models developed after 1970 have their roots in Durkheim's famous work, *Suicide* (Durkheim, 1951), including Schlossberg's Theory of Transition (1981), the Student-Faculty Informal Contact Model (Pascarella, 1980), the Non-traditional Student Attrition Model (Bean & Metzner, 1985), and Tinto's 1993 revision of his seminal work. Tinto's research found that either a low dedication to the student's completion goal or commitment to their institution could lead to dropout (1975). This means that a student may be academically successful while failing to socially or culturally integrate into their college culture. According to Tinto, either of these situations may lead to student dropout.

Tinto's (1993) Student Departure Model is the most widely cited retention theory (Figure 1). Tinto (1993) suggested three main conditions to meet to achieve student persistence: access to retention programs, retention programs that focus on all students, and retention programming that provides students with a degree of integration in both social and academic settings. What Tinto and Cullen identified in their original report, was the importance of pre-entry attributes that could have a direct impact on persistence or departure. Tinto's 1993 model identifies different student groups, such as adult and transfer students, with unique experiences requiring group-specific interventions and policies. His updated model, revised over the three decades, describes the decision-making process concerning student goal commitment and dropout, the need to match student expectations to institutional mission, and the transitions of students moving through the college process (Swail, 2004). Tinto (1993) identified various student groups, such

as African American students, low-income students, adult students, and transfer students, as having distinct experiences that require group-specific interventions and policies. Tinto's framework previously only identified a difference between male and female students in terms of how dropout appears to be related to academic grade performance and intellectual development, and it found that these populations have been affected differently. Prior research has shown that interaction among both faculty and peers leads to positive social integration and lower dropout rates among traditional students (Tinto, 1975). However, nontraditional students face additional challenges, such as professional and familial responsibilities, which make peer and faculty interactions more difficult. As a result, the risk of stop-out or dropout rate for nontraditional students is higher than for traditional students (Paulsen & Boeke, 2006).

Figure 1 *Tinto's Departure Model*



Source: Modified from Tinto (1993), copyright 1987, 1993 by The University of Chicago Press

Integration

The challenges of social integration for nontraditional students include fulfilling multiple roles (Markle, 2015), isolation between themselves and their peers, challenges with faculty (Hittepole, 2015), schedules (Markle, 2015), and culture (Hittepole, 2015). Filling multiple roles

means meeting the needs of both a student and a parent, employee, and caretaker. The challenges with interrole status, and lack of institutional commitment when the student identity is one of many, can lead to withdrawal considerations (Markle, 2015).

Faculty and Peer Interactions

Tinto (1993) affirmed that although students enter higher education with varying levels of commitment to academic success, positive faculty-student relationships can achieve academic success. Wyatt (2011) found, that while nontraditional students had neutral feelings about staff on campus, they need to be able to interact and engage with warm, friendly, supportive faculty and staff. Faculty and peer interactions are important to student persistence (Tinto, 1973; Vacchi et al., 2017) as they are the ones who contribute to or perpetuate many of the obstacles veteran students face. Tinto's early work (1975) mentions that "peer-group associations appear to be most directly related to individual social integration, whereas extracurricular activities and faculty interactions appear to be of approximately equal secondary importance in developing commitment to the institution" (p. 110). Relationships are built in and out of the classroom, so faculty who pursue out-of-class contact with their students and attempt to get to know them on a personal level are more likely to ease the transition process of starting college (Racchini, 2005). Dwyer (2015) found this to be true when looking at commuter students and found a positive correlation between student-faculty interactions and student persistence, indicating that even minimal connection before and after classes was beneficial. Research shows that peer interactions and high levels of social engagement increase the likelihood of student persistence and decrease student dropout (Hu, 2010; Tinto, 1975) because a student's peer group is the most prominent influence on their growth during undergraduate years (ASHE, 2011a). Nontraditional students report feelings of isolation due to age differences between themselves

and their peers (Hittepole, 2015). However, as previously noted, the challenges of nontraditional students in the classroom are not always related to themselves and their peers – they may also develop issues with faculty due to a lack of understanding of their role as more than just a student (Markle, 2015). While research shows peer and faculty interaction leads to positive social integration and a decrease in student dropout in traditional students (Tinto, 1975), the additional challenges of nontraditional students – like military experience, expectations, and family and career responsibilities – make peer and faculty interactions challenging. Other challenges that impede social integration are limited class times (Markle, 2015) and an institutional culture that favors traditional students (Hittepole, 2015). As a result, nontraditional students' stop-out and dropout rates are higher than the traditional student population (Hittepole, 2015).

Student Veterans-Faculty Interactions

One major component of successful social integration for students lies within faculty interaction (Pascarella & Terenzini, 1980). In this, student veterans are similar to other nontraditional adult students, where strong connections with instructors can lead to student persistence in college (O'Neil & Thompson, 2013). While some student veterans have reported trouble connecting with peers, many have found success building discipline- or subject-based relationships with faculty (Heineman, 2017; Wilson et al., 2013). One study found veterans mentioned pivotal experiences early in their academic careers when teachers had taken extra time with them or told them that they had potential; this resulted in increased academic integration and made them feel part of the community (Blaauw-Hara, 2016). Student veterans emphasize the importance of support, whether family, faculty mentors, or student veteran networks (Camacho, 2021). One challenge for student veterans is the ease with finding a mentor.

In the military, one receives guidance through a formal chain of command; however, a student must seek out individuals for advice and mentoring (Camacho, 2021). There is no structure in higher education for formal assignments of mentors and mentees; therefore, students must seek out their own faculty mentor (Camacho, 2021). Student veterans may feel more comfortable with faculty members since they are closer in age (Camacho, 2021), opening the door to a relationship, yet some prefer not to have their military affiliation tied to their student status and would rather blend in and not “stick out all the time” (Atkinson et al., 2022, p. 14). Faculty's personal views on military actions can make student veterans feel silenced and unwilling to share their experiences (ASHE, 2011c). Miscommunications and social customs of military life can strain faculty-student relations. Research noted that veterans wanted faculty members to merely acknowledge their veteran status (DiRamio et al., 2008; Olsen et al., 2014), support them on campus (Vest et al., 2022), yet not treated or viewed differently because of their service history (Vest et al., 2022), or use them as military representatives (Elliott, 2014). Veterans reported not feeling supported by faculty and staff who do not understand the military culture (Haeker, 2014; Osborne, 2014) and struggle with being identified as the voice of the armed forces (Kirchner, 2015).

Creating a more welcoming environment suggests the importance of faculty and staff providing opportunities for students to ask questions and to listen carefully to recognize the unique experiences that student veterans bring (Camacho, 2021). One way faculty and staff can support student veterans is through Green Zone training, an initiative that provides locations recognized by Veterans as safe places to aid in their transition from military to university and civilian life (Nichols-Casebolt, 2012). Vest et al. (2022) found veterans may need different types of resources, support, or engagement based on the amount of time since their military service

concluded; therefore, communicating with student veterans is imperative to providing appropriate support.

Student Veterans-Peer Interactions

A deployment's physical, emotional, or social traumas can make it difficult for student veterans to transition to student life and connect with peers (Kirchner, 2015). Blackwell-Starnes's (2018) research found that peer interaction influenced student veterans' sense of belonging, and, based on her study, intentionally increasing peer interaction prevented isolation in student veterans. However, while finding a peer group may be easy for traditional students, student veterans may have a more difficult time rebuilding those relationships due to age differences (Blaauw-Hara, 2016; Griffin et al., 2015; Kirchner, 2015; Osborne, 2014), maturity (Hammond, 2015; Heineman, 2017; Olsen, et al., 2014; Rumann & Hamrick, 2010), experience (Olsen et al., 2014), external obligations (Vest et al., 2022) and different priorities in their pursuit of education (Bagby et al., 2015; Schiavone et al., 2014). Additionally, for the student veteran, creating new relationships with others can be daunting or challenging, given their relationships from their military experience have been determined by a strict hierarchical environment (Braxton, 2011). Blaauw-Hara's (2016) interviews revealed that student veterans are constantly on the lookout for other "teammates," or those who share their unique service-related experiences.

Veterans prefer to blend in as a "survival" tool with their peers (ASHE, 2011a), tapping them as guides to help them gain information on navigating their campus (Griffin et al., 2015). Unfortunately, this act of blending in only serves as a temporary fix and does not assist with proper social integration. Having little in common with their undergraduate peers is an issue veteran student share with the rest of the nontraditional population (Blaauw-Hara, 2016;

DiRamio et al., 2008; Griffin et al., 2015). Many prefer to associate with other veterans (Vacchi et al., 2017), which may affect the breadth of their peer networks (Camacho, 2021). The presence of veterans on campus mimics the camaraderie and support they once felt in combat, influencing their identity and experience as students (Vacchi et al., 2017). Jenner's (2019) findings echoed this regarding academic success. Taking advantage of veteran peer tutoring provided a safe space to admit gaps in knowledge and a support system that understood the other's situation. Vacchi et al.'s (2017) research found that veterans felt more comfortable in the presence of other veterans, providing support and encouragement to which they were accustomed, whether it is in an informal setting or through the institution's local chapter of the Student Veterans' Association, which helped lessen social isolation and increase social integration (Blaauw-Hara, 2016). Baechtold (2009) found this true for female military-affiliated students due to the mental, social, and internal dimensions that influence how they make meaning of their military experiences and how they perceive the campus community views them. Notwithstanding the age differences, maturity level, and experience, relationships with peers and faculty alike are crucial to a stronger sense of social integration (Gilardi et al., 2011).

Persistence

Nontraditional Students

Some of the most common characteristics that distinguish traditional and nontraditional students include being a first-generation student, have dependents, delayed college entry by one or more years or a gap in education, is enrolled part-time, is employed full-time, or does not have a high school diploma (Hittepole, 2015). Additional characteristics that differentiate nontraditional students include military service or alternate route to high school completion, in addition to more work responsibilities and less flexibility, availability, and family support.

Studies have also classified students by the number of nontraditional characteristics with levels ranging from minimally nontraditional to highly nontraditional (NCES, n.d.). Additionally, they are also commuters, so social or faculty interactions are limited to class time (Dwyer, 2015).

Nontraditional students, typically at a different place in their lives than traditional students, also bring a more mature mindset (Ellis, 2019). As a result, nontraditional students seek more profound, meaningful answers and discussions from their classes (Ellis, 2019) as well as one clear goal in mind – to earn a college degree (Barnett, 2014). As such, nontraditional students have high expectations of their faculty as well (Barnett, 2014). For this demographic, enrollment is a bridge between theory and practice, where they apply subject matter to their professional lives (Gilardi et al., 2011). Tinto (1993) added, “For them going to college is more frequently a matter of economic needs than it is a youthful rite of passage” (p. 76). While Barnett’s (2014) research found that when nontraditional students had success during their first semester, they were more likely to persist, most research on nontraditional student persistence historically has a high attrition rate due to the complexities of their circumstances (Ellis, 2019). Schedules, age differences, and outside responsibilities, nontraditional students experience more difficulties and fewer opportunities to utilize university services, affecting their community and social integration (Gilardi et al., 2011). Considering the high attrition rate, it is important to identify early attrition and provide resources to combat stop-out or dropout before it happens.

Student Veterans

Research has concluded that the experience, knowledge, and unique needs of student veterans have an effect on their transition (Bagby et al., 2015; Griffin et al., 2015; Olsen et al., 2014; Schiavone et al., 2014). Yet, little is known about the relationship between demographical factors or pre-entry attributes of a student veteran’s outcomes in higher education. Cate (2014)

identified two paths student veterans traditionally encounter. The first is Path Alpha. This is the traditional path where an individual enters the military after high school, fulfills his or her service obligations, and then enrolls in a higher education institution. Since his or her military service is complete, he or she can persist to graduation uninterrupted by military obligations. The second path, Path Beta, reflects the experience of reservists and National Guard units. In this scenario, an individual enrolls in college after joining the military as a reservist or National Guard member, inviting the risk of being activated during the school term, where the military obligation causes a temporary stop-out (Jenner, 2021). Challenges with this include student veterans waiting months before continuing their studies or potentially running out of GI Bill benefits. Cate's (2017) follow-up study found that withdrawing from classes before the end of the term did not negatively affect a student veteran's college completion. These results suggest that student veterans are motivated and have a high degree of self-efficacy, and despite potential setbacks in their academic careers, they have the desire to persist.

Sansone's (2020) study looked at the risk of stop-out and graduation for student veterans compared to transfer students using precollege and demographic characteristics, environmental and policy-related factors, and college experiences as variables. This research found that part-time enrollment, transfer GPA, and institutional GPA were significantly related to stopping out. As noted earlier, those in the reserves are more likely to stop out due to being called to active duty in the middle of a semester (Cate, 2014; Hitt, et al., 2015). Additionally, veteran status was not significantly associated with the risk of experiencing either stop-out or graduation; however, student veterans have higher odds of stop-out as time progresses, and lower odds of graduating as time progresses. The comparison to transfer students indicated that veteran status alone was not significantly related to experiencing either outcome, which supports Kim's (2013) findings

that student veterans are more likely to complete their degrees than their non-military-connected classmates, yet challenges previous literature that suggests student veterans are not as successful in higher education when compared to non-veterans.

Camacho's (2021) findings found that not only did the skills student veterans acquired in the military help with their transition but the discipline and commitment engrained into military culture also led to academic success when applied to studying and organizational habits. The socialization process incurred by the rigid military practices of their past becomes a source of resilience as they navigate their college transitions engaging with multiple support networks. It is not surprising then, that academic achievement is also seen as a way for veterans to give back to each other, particularly those who are in the early stages of transitioning from military service to higher education (Jenner, 2019).

This is supported by a study from Fernandez et al. (2019), which found an inverse relationship between student veterans and non-student veterans who felt valued by faculty and student colleagues and the odds of considering leaving their current institution. This maintains previous literature suggesting that faculty members and peers strongly affect student veterans in their classroom environments (DiRamio et al., 2008; Griffin et al., 2015; Osborne, 2014).

Racial and Ethnic Minorities

Studies show racial and ethnic minorities have different college experiences than their White peers, where the lived experiences of Black and Latino students prior to college place them at a disadvantage compared to other groups, as socioeconomic status is a powerful predictor of persistence (Baker et al., 2012). These experiences affect their integration both academically and socially. For example, Baker et al. (2012) found both Whites and Asian Americans had significantly higher high school GPA and SAT scores than Latinos, yet no

significant differences in the academic preparation, socioeconomic status, or GPA of Latinos and Blacks. Campbell et al. (2017) support Baker's earlier findings where race/ethnicity played a role in comparing female drop-outs with females who remained continuously enrolled. However, in this study, Asian females had a lower relative risk of dropping out than White females.

Ethnicity and race can also affect the social integration of a student. According to Musoba et al. (2013), Black and Latino students may need affirmation that they belong in higher education, where feedback from faculty members can validate good performance and encourage low performance. (Sinanan, 2016) found some African-American students attending predominantly white universities experienced challenges regarding their cultural identity and desire to acclimate. As a result, they seek out faculty of color informally, which then evolves into mentorships that aid in retaining students of color at predominantly white universities (McClain et al., 2017). Support programs that make personal contact between faculty and students (Xu et al., 2017) and collaborative learning and group tutoring (Baker et al., 2012; Musoba et al., 2013) are more effective in increasing the likelihood of success for Black students.

Summary

This review of the literature creates a complete picture of the female military-affiliated student. As nontraditional students, veterans, females, and civilians, their identities shape their transition, experience, and intent to persist in higher education. As nontraditional students, conflicts between established professional and personal responsibilities and student responsibilities can be challenging (Bean & Metzner, 1985). Additionally, they may experience isolation from their peers (Grabowski et al., 2016), inflexible classes, lack of institutional offerings, or persisting on a part-time status (Taniguchi et al., 2005). The military-affiliated student identity faces challenges, including transitioning from military to civilian life, difficulty

adjusting to an academic setting, mental health issues, dissatisfaction with campus support, lack of structure related to student benefits, and problems with relationships with faculty, staff, and peers.

Finally, the transition experience for female students differs from males due to gendered identity tendencies impacting the likelihood of seeking help from faculty or male military-affiliated students. Female military-affiliated students are less likely to allow others, especially men, to help them, even when necessary, for fear of appearing weak – tendencies from the service they bring to campus. Additionally, relationships with male military-affiliated students are strained due to the feelings of rejection and alienation while previously deployed.

Despite these challenges, nontraditional students, military-affiliated students, and females have all desired to persist. These students seek an informed, purposeful college experience to earn a college degree (Barnett, 2014). With high expectations of their faculty and their education, their experience bridges theory and practice, where they apply subject matter to their professional lives. Military-affiliated students differ from the nontraditional population regarding the pre-entry attributes they bring to the college campus. However, the expectations, skills, and relationships built during their time in the military support their success in their academic ability and intent to persist.

CHAPTER 3

METHODOLOGY

Statement of the Problem

Military-affiliated students are a distinct population within the nontraditional student community who face additional challenges during their academic journey. They are transitioning out of military life and acclimating to civilian and student life, creating new identities throughout the process. There is an even smaller - but growing - subset of female military-affiliated students within this subpopulation. As a minority in the military, this underrepresented population brings with them the pre-entry attributes such ingrained gender roles and expectations of military life, which is then overlaid on both civilian and student identities. Other pre-entry attributes that may influence academic integration and college persistence include sexual trauma, domestic responsibilities, or childcare. The compounding characteristics of three different identities (servicemember, student, and female) and the very distinct pre-entry attributes associated with each make the transition from military to civilian student life difficult.

Purpose Statement

The purpose of this correlational study was to test the theory of Tinto's (1975, 1993) Institutional Departure Model that relates academic integration to college persistence, controlling for pre-entry attributes for female military-affiliated students at Great State University. The independent variables of interest: academic coaching or tutoring sessions, were generally defined as academic integration. The dependent variables of stop out and dropout were generally defined as college persistence. Students were classified as stop out if their Fall 2022 classification was two or fewer years further than their semester of enrollment, and classified as dropout if their Fall 2022 classification had remained the same after three or more years. The control and

intervening variables, age, race, and ethnicity were defined as pre-entry attributes and statistically controlled in this study. This understanding will assist faculty and staff in identifying practices for quality programming for military-affiliated female students and provide higher education administrators with conceptually grounded research to guide decisions about policies, procedures, and resources to enhance the quality of female military-affiliated students' college experiences.

Research Questions

The main research question for this study is: *What is the relationship between academic integration and educational persistence for female military-affiliated students in the southeastern United States?* The underlying or sub-questions of this primary inquiry include the following:

1. To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?
2. What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?

Significance of the Study

The significance of this research to the academic community was to add to the body of literature of military-affiliated students in higher education and advocate for female military-affiliated students through equity and inclusion in policies, practices, and resources in and out of the classroom to encourage academic integration and college persistence. Additionally, female military-affiliated students pre-entry attributes including the results of military life, such as Post

Traumatic Stress Disorder (PTSD), military sexual trauma (MST), and gendered identities, were complicated by the complex role of the mother or primary caretaker upon return. The challenges specific to female military-affiliated females are in addition to the identified challenges for nontraditional students and military-affiliated students. The gap in the empirical literature on female military-affiliated students and their academic journey in higher education indicates a population of students whose needs are unmet or even considered.

As military-affiliated students must navigate two new roles as they join the college community, student and civilian, they need to find support and a sense of belonging from faculty and military-affiliated students-friendly policies and resources from the administration that support their academic growth. Higher education can support female student veterans through intentional academic programming and support by recognizing transitional issues for female military-affiliated students as one would for any high- or at-risk student.

Procedures

Research Design

This study was a follow-up to a pilot study conducted in the spring of 2020 (Dean et al., 2020). The pilot study looked at peer-group and faculty interactions of 87 veteran undergraduate students at a comprehensive regional university in southeast Georgia. Using linear regression analysis, findings demonstrated that faculty interactions accounted for 23% of the variance in peer-group interactions. A limitation of the study was the non-random sample of participants, as all students contacted for this study were identified as student veterans at one university. Another limitation was the small sample size of 87 participants. Thus, the results were not generalizable to all student veteran populations. Recommendations for further research necessitated the need to identify if there are gender differences during the transition process for student veterans. As

some of the women-focused literature showed, the gendered military experience had a lasting impact on their civilian life and how they socially and academically engage on campus (DiRamio & Jarvis, 2011; DiRamio et al., 2015; Heineman, 2017).

The study employed a quantitative framework using Tinto's (1975, 1993) Longitudinal Model of Dropout. Using longitudinal data from a large public four-year institution in Georgia from Fall 2018 to Fall 2022, this study looked at academic and motivational variables as well as the access of military benefits, and how this impacted college persistence. It is important to note that this institution was located within 50 miles of a military installation with an established infrastructure providing services and support to members of the military, military-affiliated students, and their families. The Office of Military and Veteran Services at GSU serves three separate campuses and provides educational resources, military resources, Veterans Affairs assistance, peer-to-peer tutoring and more for current or former member of the US military and their families. Additionally, the institution provides resources for faculty and staff to increase the knowledge and skills of GSU's faculty and staff to support their military-affiliated students such as Green Zone training, certification training, and online interactive training simulations (Georgia Southern University, 2022).

Data Collection

Before the study, the researcher obtained appropriate approvals from Great State University (GSU), a pseudonym, a Southeastern public four-year research institution (Carnegie Classification: Research University – high research activity [RU/H]). The researcher sent a letter of cooperation to the Division of Enrollment Management (Appendix A). The second letter was sent to the Institutional Review Board. The longitudinal data for this study was obtained from Great State University's Office of Institutional Research through a data sharing initiative

between the College of Education and Enrollment Management. The Office of Institutional Research pulled the data directly from the Banner Student Information System (SIS) and de-identified the records to protect student privacy.

For this study, the researcher drew from Great State University's data files, which tracked data during the fall semester when students were enrolled across a five-year period of time (Fall 2018 - Fall 2022). This data was collected from student demographics, admissions applications, institutional academic performance, and veteran education benefits. Data from institutional data files also provided time-varying information about each student's enrollment status, part-time status, major, and institutional cumulative GPA. Data from the Banner SIS included: *Time to a degree (how many years until degree conferred); Final Major; Number of times on academic probation; Year in school (graduated or still active)*. This information indicated academic integration through enrollment status or the utilization of academic support services. Data initially captured on the admissions application and currently stored in Banner SIS includes: *Legal sex; Age based on date of birth; Ethnicity; Race; and Reserves status*. Use of student success center resources/tutoring data are based on participation rates in EAB Navigate.

The data source also captured students' status as a veteran or non-veteran certified by the Office of Military and Veteran Services and stored in Banner SIS. The term military-affiliated students included veterans, reservists, and those in the National Guard.. Students included in this data set received the Montgomery GI Bill (Chapter 30), Vocational Rehabilitation benefits (Chapter 31), or Post 9/11 GI Bill (Chapter 33) benefits from Fall 2018 to Fall 2022. These benefits were specific only to military-affiliated students and did not include educational benefits that were applicable to a military-affiliated student's spouse or dependent. Using this

information, a longitudinal data set was constructed which captured pre-entry attributes that would be used to measure academic integration.

Setting

The setting for this research took place from the fall semester in 2018 to the fall semester of 2022 at Great State University in the southeast United States. The Division of Enrollment Management provided a data set of all student veterans using the Montgomery GI Bill (Chapter 30), Vocational Rehabilitation benefits (Chapter 31), or Post 9/11 GI Bill (Chapter 33) benefits from Fall 2018 to Fall 2022. Participants included in this data set were only those with prior military experience and did not include any of the military dependents.

Participants

This quantitative study will use a purposive sample of military-affiliated students which included veterans, reservists, and those in the National Guard. Students included in this data set were enrolled at GSU and received the Montgomery GI Bill (Chapter 30), Vocational Rehabilitation benefits (Chapter 31), or Post 9/11 GI Bill (Chapter 33) benefits from Fall 2018 to Fall 2022. For this research, the Division of Enrollment Management prepared a report for military-affiliated students who utilized military benefits from Fall 2018 to Fall 2022. Military-affiliated student veterans from the Air Force, Army, and Navy, , reservists, and members of the National guard, were all included in the data set. Female students who have served in the U.S. Armed Forces were the focus of this study and were identified by their admissions application

Data Analysis

The selected independent variables were guided by the theoretical framework and availability of institutional data. Precollege and demographic pre-entry attributes included the students' sex, race, ethnicity, age at first enrollment, and military branch, including the Reserves

and National Guard. The outcome variable for this study was college persistence or graduation for a student. A student was considered graduated when awarded a bachelor's degree at any point during the duration of this study. Students were dummy coded based on their Fall 2022 classification. Freshmen were coded as 1, Sophomores were coded as 2, Juniors were coded as 3, Seniors were coded as 4, and graduated students were coded as 5. Military branches were also coded for analysis. Army was coded as 1, Navy was coded as 2, Air Force was coded as 3, National Guard/Reservist was coded as 4, and Veteran/No Branch was coded as 5. Students were classified as experiencing dropout, stop out, or neither, based on their cohort year and Fall 2022 classification.

Table 1

Participant Demographics: Years of Education/ Stop out/Dropout Status

Stop Out/ Dropout Status	n	Years of education/study				
		Fresh.	Soph.	Jun.	Sen.	Graduated
Stop Out	35	11	18	10	0	0
Dropout	35	22	13	0	0	0
Neither	161	50	28	1	92	32

Freshman Status

Students in the 2018 or 2019 cohort classified as freshmen in Fall 2022 were coded with a dropout status. Students in the 2020 cohort classified as freshmen in Fall 2022 were coded with the stop out status. Students in the 2021 or 2022 cohorts classified as freshmen in Fall 2022 were not classified with the dropout or stop out status.

Sophomore Status

Students in the 2018 or 2019 cohort classified as sophomores were coded as dropout. Students in the 2020 cohort classified as sophomores were coded as stop out. Students in the

2021 or 2022 cohort classified as sophomores were not classified with the dropout or stop out status.

Junior Status

Students in the 2018 cohort classified as juniors were coded as stop out. Students in 2019, 2020, 2021, or 2022 cohorts were not classified with the dropout or stop out status.

Senior Status

Anyone with a senior or graduated status in any cohort was not coded with a dropout or stop out status.

This study employed a series of binary logistic regressions. In these regressions, age and military branch served as exogenous predictors of academic coaching and tutoring, which both served as mediators in all models. Dropout (yes, no) and stop out (yes, not) served as the criterion variables in each logistic regression, respectively. A covariate-adjusted odds-ratio (CAOR) was employed as the measure of the effect of any given predictor on the outcomes.

For both dropout and stop out, the “yes” category was used as the referent category. For ethnicity (RQ1) as a categorical predictor, White was employed as the referent category and for military branch as a categorical predictor (RQ2), “veterans who did not claim a given branch” was used as the referent category. While all results would be the same no matter what category is the reference, since the RQ1 compared different students of color to White students, and any student identifying a military connection to not claiming a branch, White students and “no branch” were chosen as referent categories. Thus, for the ethnicity categorical predictor, a CAOR above 1 is interpreted such that a female military-affiliated student identifying as a minoritized group had a higher likelihood of dropping out or stopping out. Likewise, for the military branch categorical predictor, a CAOR above 1 indicates that the branch in question was more likely to

stop out or dropout compared to those female military-affiliated students who did not indicate a military branch.

Summary

For this study, the main research question, “*What is the relationship between academic integration and educational persistence for female military-affiliated students in the southeastern United States?*” was answered by the two sub questions, “*To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?*” and “*What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?*” through a series of binary logistic regressions where age and military branch served as exogenous predictors of academic coaching and tutoring, which both served as mediators in all models. For both dropout and stop out, the “yes” category was used as the referent category, as was White (ethnicity) for RQ1, and “veterans who did not claim a given branch” for RQ2. . Students were classified as stop out if their Fall 2022 classification was two or fewer years further than their semester of enrollment, and classified as dropout if their Fall 2022 classification had remained the same after three or more years.

CHAPTER 4

RESULTS

The purpose of this current study was to empirically test and explore the applicability of Tinto's theory as it relates to nontraditional student integration and persistence through the pre-entry attributes of female military-affiliated students entering postsecondary education. In addition, the current study examined the possibility of age and military branch as predictors of academic coaching and tutoring influence of academic integration factors. Tinto's Model of Student Departure served as the theoretical guide for this study along with three research questions. The population explored and sample selected are outlined, followed by a presentation of the data.

Instrumentation and Methods

The methods used to analyze the survey data included a series of binary logistic regressions. In these regressions, age and military branch served as exogenous predictors of academic coaching and tutoring, which both served as mediators in all models. The collection of quantitative data was compiled by the Division of Enrollment Management, who then prepared a report of military-affiliated students who utilized military benefits from Fall 2018 to Fall 2022.

Descriptive Analysis

Population Sample

The study's population consisted of past and current university students with prior active military experience from GSU. For the purpose of this study, the term military-affiliated students included veterans, reservists, and those in the National Guard who utilized military benefits from Fall 2018 to Fall 2022. The total number of students fitting the stated definition was 324.

Demographics

The institutional data provided demographic data including cohort term number of major changes, time to degree, number of tutoring appointments, number of academic coaching appointments, current degree, current major, times on probation, sex, race, classification, ethnicity, age at first enrollment, military branch, and military benefits used. For this study, the number of tutoring appointments and number of academic coaching appointments were identified as academic integration. These two variables demonstrated the participants' desire to further their academic career through educational plans and expectations (Tinto, 1975), which supports the students goal commitment of college persistence.

The majority of the population at the time the data was collected were either Seniors (28.3%) or Freshman (25.5%), followed by Sophomores (18.1%), Juniors (17.8%), and then graduated (9.8%) (Table 2). Nearly half of the population were veterans (49.5%), followed by Guard/Reservists (25.2%) and active duty (24.9%). Of the 82 Guard/Reservists, 59.7% were in the National Guard, 28% were in the Reserves, and 12.1% did not identify a branch. In the Active group, of the 77 participants, 91.3% were in the Army, 4.9% did not identify a branch, 2.4% were in the Navy, and 1.2% were in the Air Force. Nearly half of the participants identify as Black or African American (48.9%), followed by White (27.3%), Hispanic of any race (13.5%), Two or more races (4.3%), Asian, 3%, unknown (1.5%), and American Indian/Alaska Native (.1%) (Table 3). At the time the data was collected 19.4% were 19 or younger, 57% were ages 20-29, 16.9% were 30-39, 4.9% were 40-49, 1.2% were 50-59, and 0.3% were 60 or older.

Table 2

Participant Demographics: Years of Education/Study by Branch of Service

Branch of Service	<i>n</i>	Years of education/study				
		Fresh.	Soph.	Jun.	Sen.	Graduated
Air Force	1	1	0	0	0	0
Army	74	24	16	16	15	3
National Guard	49	14	10	5	16	4
Navy	2	0	1	0	1	0
Reservist	23	6	4	5	4	4
Veteran	127	33	23	19	38	14
Did not identify	48	5	5	13	18	7
Total	324	83	59	58	92	32

Table 3

Participant Demographics: Ethnicity/Service Status

Service Status	<i>n</i>	Ethnicity						
		American Indian/Alaska Native	Asian	Black or African American	Hispanic (of any race)	Two or More Races	Unknown	White
Active Duty	81	1	4	36	14	4	0	22
Guard/Reserves	82	1	1	52	13	2	1	12
Veteran	161	1	5	71	17	8	4	55

Research Questions

The main research question for this study is: *What is the relationship between academic integration and educational persistence for female student veterans in the southeastern United States?* The underlying or sub-questions of this primary inquiry include the following:

1. To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?
2. What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?

Research Question One

To what degree does academic integration mediate the relationship between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?

To answer research question one, the researcher used a mediation analysis of academic integration between age and military branch on dropout and stop out. The researcher used statistical analysis software, SPSS, to calculate a series of binary logistic regressions.

Regarding dropout as the outcome, neither age nor military branch were significant predictors. Similarly, neither mediator, academic coaching nor tutoring sessions, was a significant predictor of dropout for this sample of female military-affiliated students. Finally, the exogenous predictors, age and military branch, did not significantly predict the mediators, academic coaching and tutoring sessions. Thus, the omnibus model with dropout as the outcome did not yield any meaningful results, $\chi^2 (df = 5, N = 324) = 8.95, p = .11$.

With respect to stop out as the outcome, the omnibus model was statistically significant, $\chi^2 (df = 2, N = 324) = 8.71, p < .01$, indicating that the combined predictors accounted for 29% of the variability in stop out, Nagelkerke's Pseudo $R^2 = .290$. Older female military-affiliated students were marginally more likely to stop out than younger female military-affiliated students

(CAOR = 1.23). Further, female military-affiliated students enlisted in the Navy were 9.30 times more likely to stop out than those female military-affiliated students who did not indicate their military branch, and those enlisted in the Army were 2.14 times more likely to stop out than female military-affiliated students who did not list their military branch. Nevertheless, academic integration factors, here defined as academic coaching and tutoring sessions, did not partially or fully mediate the relation between age and military branch and stop out, all p -values $\geq .153$.

Table 4 contains the omnibus model coefficients and the 95% confidence intervals of the CAOR.

Table 4

Binary Logistic Regression Results for the Prediction of Age and Military Branch on Stop Out

Predictor	CAOR CI _{95%}				
	Wald	p -value	CAOR	LL	UL
Age	3.97	.032*	1.23	1.05	1.41
Military Branch					
Army	5.42	< .001*	2.14	1.95	2.33
Navy	11.15	< .001*	9.30	7.99	10.61
Air Force	0.00	1.00	0.00	0.00	0.00
National Guard	1.28	.589	0.54	.17	1.70

Note. CAOR CI_{95%} = 95% confidence interval for the covariate-adjusted odds ratio; CAOR = covariate-adjusted odds ratio; LL = lower limit; UL = upper limit.

* $p < .05$.

Research Question Two

What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key

sociodemographic characteristics?

To answer research question two, a series of binary logistic regressions were conducted to address the predictive effect of ethnic differences on dropout and stop out, respectively, while controlling for age and military branch. Thus, the CAORs (Covariate Adjusted Odds Ratio) for these results are adjusted to partial out the influence of the covariates in the model to assess the impact of the predictor(s) of interest more clearly, in this case ethnicity. For these analyses, female military-affiliated students who identified as American Indian/Alaska Native, Asian, or Unknown were omitted from all subsequent analyses because their numbers totaled 10 or fewer, thereby making substantive interpretation using these ethnic categories statistically impractical.

Regarding dropout, Hispanic military-affiliated females were 2.56 times more likely to dropout when compared to White female military-affiliated students, $\chi^2 (df = 5, N = 324) = 9.63$, $p < .01$, indicating that the combined predictors accounted for 23% of the variability in stop out, Nagelkerke's Pseudo $R^2 = .230$. Table 4 displays the omnibus model coefficients and the 95% confidence intervals of the CAOR. Both Black/African American (0.60) and Two or more races (0.45) had a CAOR below 1 which was interpreted such that females identifying in those groups had a lower likelihood of dropping out.

Table 5

Binary Logistic Regression Results for the Prediction of Ethnicity on Dropout

Predictor	Wald	<i>p</i> -value	CAOR	CAOR CI _{95%}	
				LL	UL
Ethnicity					
Black/African American	1.42	.63	0.60	0.14	1.06
Hispanic (of any race)	8.03	< .001*	2.56	1.99	3.13
Two or more races	0.48	.53	0.45	0.12	0.78

Note. CAOR CI_{95%} = 95% confidence interval for the covariate-adjusted odds ratio; CAOR = covariate-adjusted odds ratio; LL = lower limit; UL = upper limit.

**p* < .05.

With respect to stop out, Black/African American female military-affiliated students were 2.16 times more likely to stop out than their White female counterparts whereas Hispanic female military-affiliated students were 2.35 times more likely to stop out compared to their White female counterparts, χ^2 (*df* = 5, *N* = 324) = 12.11, *p* < .01, indicating that the combined predictors accounted for 28% of the variability in stop out, Nagelkerke's Pseudo R^2 = .283. Table 6 displays the omnibus model coefficients and the 95% confidence intervals of the CAOR. Students who identified as two or more races had a CAOR of 0.50, which indicated a lower likelihood of stop out.

Table 6

Binary Logistic Regression Results for the Prediction of Ethnicity on Stop Out

Predictor	CAOR CI _{95%}				
	Wald	<i>p</i> -value	CAOR	LL	UL
Ethnicity					
Black/African American	8.11	< .001*	2.16	1.89	2.43
Hispanic (of any race)	8.56	< .001*	2.35	1.93	2.77
Two or more races	0.93	.893	0.50	0.21	0.79

Note. CAOR CI_{95%} = 95% confidence interval for the covariate-adjusted odds ratio; CAOR = covariate-adjusted odds ratio; LL = lower limit; UL = upper limit.

**p* < .05.

Summary of Findings

This chapter presented the data provided by the Division of Enrollment Management for female military-affiliated students who utilized military benefits from Fall 2018 to Fall 2022. To analyze the survey data, a series of binary logistic regressions was calculated to explore the relationship between academic integration to college persistence for female military-affiliated students. In these regressions, age and military branch served as exogenous predictors of academic coaching and tutoring, which both served as mediators in all models.

Major findings indicated that neither age nor military branch were significant predictors regarding dropout as the outcome; however, with respect to stop out as the outcome, age and military branch were statistically significant. While controlling for age and military branch, Hispanic female military-affiliated students were more likely to dropout when compared to

White female military-affiliated students, and both Black/African American and Hispanic females were more likely to stop out than their White female counterparts. To address the overarching question, “*To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?*” in this current study, ethnicity had a larger effect on stop out or dropout as compared to age or military branch alone.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

Introduction

This chapter provides a summary of the present study about female military-affiliated students' pre-entry attributes and their relation to college persistence and associates the reported data from chapter four with extant literature on the topic. A synopsis of the major findings is analyzed by research question. A discussion of the conclusions that were drawn based on the literature related to the major findings will provide an understanding from the researcher's perspective. Implications for actions suggest measures colleges and universities can take to meet female military-affiliated students' needs further. This chapter contains recommendations for further research and concludes with remarks and reflections.

This study helps broaden the research base on the military-affiliated female student population as the findings of this study revealed the pre-entry attributes that had a significant impact on students' success in higher education. These findings add to the body of literature about the needs and support for military-affiliated females who experience the compounding challenges of the nontraditional, military-affiliated, and female populations. The information offered for this population and recommendations could be shared with higher education institutions that work with female military-affiliated students on campus. This research only addresses the academic integration component of Tinto's theory of student departure. Therefore, it also demonstrates the importance of continuing research from a social integration standpoint, as this underserved population is continuing to grow each year both in the military and on college campuses. It is necessary to continue this line of research to ensure that this community of learners is supported emotionally, professionally, and academically and that those within the

postsecondary field are informed and can support this growing population.

The need for this research was revealed through the gap in the literature within the existing knowledge of female military-affiliated students. There is robust literature on veterans in general and many qualitative and phenomenological studies to understand the perspectives of female military personnel. However, there is little quantitative data to identify and address specific barriers that prohibit success. Military-affiliated and veteran female students possess challenges unique to their situation which may negatively affect the odds against persistence. Their multi-faceted identities are challenged by the issues and concerns from deployment and responsibilities as caretakers as they navigate campus as nontraditional students (Buckley, 2021).

This study sought to understand what pre-entry attributes of female military-affiliated students were associated with the likelihood of stop out and dropout. The information provided from the female military-affiliated students' experiences can benefit other female military-affiliated students transitioning into postsecondary education as well as higher education institutions and their efforts to help support this minority population. To gather this information, a purposive sample of past and current university students with prior active military experience was provided by the Division of Enrollment Management at Great State University. Female students who were either active or former active duty, reservists or retired, and represented all military branches were included in the data set. Female students who have served in the U.S. Armed Forces are the focus of this study. To gather this information, the following research questions guided the study:

The overarching research question was: *What is the relationship between academic integration and educational persistence for female military-affiliated student in the southeastern United States?* The underlying or sub-questions of this primary inquiry include the following:

1. To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?
2. What is the difference in academic persistence amongst Black or African American, Hispanic (of any race), multiracial, and White female military-affiliated students while controlling for key sociodemographic characteristics?

Summary of Findings

The researcher was provided the data of 324 military-affiliated females who were enrolled in a four-year, research institution who were enrolled in the years Fall 2018 to Fall 2022 to identify the relationship between academic integration and college persistence. The number of pre-entry attributes was bounded by the data provided to the researcher, thus limiting the robustness of the findings. Additionally, sample sizes in some subgroups were small, which precluded accounting for within-group variability in minority groups within the race/ethnicity variable.

The study had one overarching question related to the persistence of female military-affiliated students, and two sub questions addressing specific pre-entry attributes. The overarching study finding was that ethnicity had a larger effect on stop out or dropout as compared to age or military branch alone; however, with respect to stop out as the outcome, age and military branch were statistically significant. While controlling for age and military branch, Hispanic female military-affiliated students were more likely to dropout when compared to White female military-affiliated students, and both Black/African American and Hispanic females were more likely to stop out than their White female counterparts. Additionally, the

highest rate of stop out and drop out happened in the first two years of enrollment.

Discussion

Research Question One

Research question one asked: *To what degree does academic integration mediate the relation between pre-entry attributes and educational persistence among female military-affiliated students in the southeastern United States?*

Using a series of binary logistic regressions, a mediation analysis of academic integration was used between age and military branch on dropout and stop out. Regarding dropout as the outcome, neither age nor military branch were significant predictors. Similarly, neither mediator, academic coaching nor tutoring sessions, was a significant predictor of dropout for this sample of female military-affiliated students. Finally, the exogenous predictors, age and military branch, did not significantly predict the mediators, academic coaching and tutoring sessions. Thus, the omnibus model with dropout as the outcome did not yield any meaningful results, $\chi^2 (df = 5, N = 324) = 8.95, p = .11$.

In relation to stop out as the outcome, the omnibus model was statistically significant, $\chi^2 (df = 2, N = 324) = 8.71, p < .01$, indicating that the combined predictors, age and military branch, accounted for 29% of the variability in stop out, Nagelkerke's Pseudo $R^2 = .290$. Quantitative data revealed older female military-affiliated students were marginally more likely to stop out than younger female military-affiliated students. This varied from Schreiber et al.'s (2017) study which found that age of military personnel did significantly impact both academic success and satisfaction with learning. There is inconsistent data related to military-affiliated learners and academic success – some studies show older service members are further removed from formal education than their freshmen and sophomore counterparts and may be less likely to

feel comfortable with coursework and educational technology (Camacho, 2021; Jenner, 2019), where another found the longer a military veteran had been home since their last deployment, the more academically motivated they were (Morreale, 2011). As a higher percentage female military-affiliated student are divorced (Garasky, 2016; National Center for Veterans Analysis and Statistics, 2016), it is reasonable to infer that those who have children more likely to be the primary caregiver (Iverson et al., 2016), and challenging the balancing of identities. Yet another study found that veterans who had children were more likely to persist than their peers who did not have children (Heitzman, 2015). The success of military-affiliated learners depends on the ability of the student to manage multiple responsibilities, including education, family, work, and personal responsibilities.

The second finding of interest was based on branch: Female students enlisted in the Navy were 9.30 times more likely to stop out than those female military-affiliated students who did not indicate their military branch, and those enlisted in the Army were 2.14 times more likely to stop out than female military-affiliated students who did not list their military branch. Although military-affiliated students have their service in common, they are not a homogeneous group (Camacho, 2021; Vest et al., 2022). This includes their educational attainment while enlisted. Throughout military careers, service members are required to attain sequential levels of continuing professional military education. Enlisted personnel must complete educational requirements specific to their enlisted military branch to become eligible for each following level of promotion (Department of the Air Force, 2016; Department of the Army, 2014; Department of the Navy, 2018). However, not all military branches provide the same level of education. The Air Force stands out as the only branch of service that requires the advancement of enlisted personnel through specific skills measured by both academic test scores and qualifying

evaluations (Department of the Air Force, 2017) resulting in the Air Force is associated with the highest educational outcomes while service in the U.S. Army is the branch of service associated with the lowest (Teachman, 2007). Volk et al. (2020) found branch of service accounted for a large portion of the variance in educational persistence, following with the number of transcripts, age, and marital status as influential factors for effecting persistence.

Finally, academic integration factors, here defined as academic coaching and tutoring sessions, did not partially or fully mediate the relation between age and military branch and stop out. Academic coaching and tutoring were identified as they align with Tinto's (1993) suggested three main conditions that are needed to be met to achieve student persistence: access to retention programs, retention programs must focus on all students, and retention programming that offers a degree of integration for students in both social and academic communities. In total, only seventeen individual students utilized tutoring appointments for a total of 130 visits, and fifteen students used academic coaching a total of 23 times. Only three students used both tutoring appointments and academic coaching services. Lack of usage could be due to contributors. Nontraditional students face issues with scheduling, where institution services do not align with their work schedules, prohibiting them from seeking the support they need (Gilardi et al., 2011; Markle, 2015) Studies have shown that the hypermasculine military culture which expresses power through domination or humiliation of the weaker "other," including women (Finlay 2007) may prevent females from seeking the assistance they need in the classroom (ASHE, 2011c). Females are conditioned to be self-sufficient in the military, so asking for help, even in the academic setting, can be seen as weak (Iverson et al., 2016). Jenner's (2019) study found veteran peer tutoring provided a safe space and a support system for military-affiliated students. This situation provides an opportunity to support where military-affiliated

students feel comfortable receiving academic support, as it allows the student to choose who they would like to work with, and allows for alternative meetings times if they are not utilizing the university's own tutoring center.

Research Question Two

Research question two asked: *What is the difference in educational persistence between White and Black/African American, and White and Hispanic (all races) female military-affiliated students while controlling for age and military branch?*

A series of binary logistic regressions were conducted to address the predictive effect of ethnic differences on dropout and stop out, respectively, while controlling for age and military branch. Thus, the CAORs for these results are adjusted to partial out the influence of the covariates in the model to assess the impact of the predictor(s) of interest more clearly, in this case ethnicity. For these analyses, female military-affiliated students who identified as American Indian/Alaska Native, Asian, or Unknown were omitted from all subsequent analyses because their numbers totaled 10 or fewer, thereby making substantive interpretation using these ethnic categories statistically impractical.

Findings indicated that regarding dropout, Hispanic military-affiliated females were 2.56 times more likely to dropout when compared to White female military-affiliated students, $\chi^2 (df = 5, N = 324) = 9.63, p < .01$, indicating that the combined predictors accounted for 23% of the variability in stop out. Additionally, Black/African American female military-affiliated students were 2.16 times more likely to stop out than their White female counterparts, and Hispanic female military-affiliated students were 2.35 times more likely to stop out compared to their White female counterparts, $\chi^2 (df = 5, N = 324) = 12.11, p < .01$, indicating that the combined predictors accounted for 28% of the variability in stop out.

Several studies have identified similar disparities for Black/African and Hispanic military-affiliated females. Thomas et al. (2015) found that women and racial/ethnic/sexual minority veterans have higher rates of poor outcomes related to reintegration. Sansone (2020) found that being a Black/African American woman over 23 at enrollment increased the likelihood of stop-out. Another study found that higher levels of stop out and dropout rates among ethnoracial minority female military-affiliated students may be influenced by their intersectional minority status, making them doubly disadvantaged (Nagel & Feitz, 2007). Campbell et al.'s (2013) found the opposite true: White females were nearly four times more likely to stop out than Black/African American females.

When looking at ethnicity and persistence in veteran students, Semer et al. (2015) found race as a demographic impacted the academic success of first-year veterans. Similarly, Spont et al.'s (2021) study found PTSD plagued Black/African and Hispanic veterans at a higher rate than their White peers, with slight improvement after six months. This suggests that differential access to treatment or resources should be considered for Black/African American and Hispanic students (Spont et al., 2021) to address challenges resulting from lived experiences. Based on the challenges identified in previous research that plagues minorities, females, and military-affiliated students separately, these findings suggest that minority groups among female military-affiliated students may need extra care in transitioning from the military to achieving academic and social success in school.

Overarching Research Question

The overarching research question asked: *What is the relationship between academic integration and educational persistence for female student veterans in the southeastern United States?*

Although both research sub-questions of this current study focus on aspects of Tinto's model, the overarching question looks at the influence of academic integration on the longitudinal process of departure. Examination of the applicability of Tinto's theory to students' experience of academic integration indicated that pre-entry attributes affected college persistence. The overarching study finding was that ethnicity had a more significant effect on stop out or dropout than age or military branch alone; however, concerning stop out as the outcome, age and military branch were statistically significant. Additionally, the highest rate of stop out and dropout both happened in the first two years, with stop out increasing from eleven to eighteen from freshman to sophomore and dropout decreasing from twenty-two to thirteen. Creating a community for female military-affiliated students to engage quickly upon entering a university is supported by Tinto's recent work (2005), which indicates the necessity for students to remain connected to their past communities to encourage persistence. Studies show that the presence of other veterans on campus and in the classroom creates a cohesive learning environment that provides the support veterans recall from their experiences in the military (Vacchi et al., 2017) and nurtures a sense of camaraderie (DiRamio et al., 2008).

Although the literature pertains to Tinto's theory in the traditional undergraduate arena, recent studies have applied this theory to other nontraditional populations have found external factors affecting nontraditional students. Sansone's (2020) study, which looked at graduation rates, found that veteran status alone was not associated with stop out or dropout as much as ethnicity was. Choi et al.'s (2019) study on pharmacy students revealed they experienced difficulty managing their time, schedules, and behaviors because of family responsibilities; however, providing for a family was a strong motivator toward their goal commitment. A study looking at adult nursing students pursuing a degree found differences among persistence groups

in prior education and level of education but a positive correlation between academic outcome expectations and perceived faculty support (Shelton, 2012). Durdella et al. (2012) found that veteran status was associated with pre-college characteristics and college experiences related to lower achievement levels. This contradicts Sansone's (2020) study, which found that veteran status alone was not associated with stop out or dropout. Cotton et al.'s (2017) findings were similar in that targeted support, whether a faculty member or tutor who developed a relationship with the student and could talk about non-academic issues, was significant in discouraging alienation. This aligns with current research on military-affiliated students who emphasize the importance of support yet are challenged to find a mentor because they must seek out on their own when in the past, they received guidance through a formal chain of command (Camacho, 2021).

The diverse nature of the students in this study and the pre-entry attributes that affect military-affiliated students' likeliness to stop out or dropout indicates the need for differentiated social, academic, and professional resources. Additionally, early identification of a student's lack of academic integration appears vital to student retention and success; therefore, the actions of the faculty, especially in the classroom, are essential to institutional efforts to enhance student retention (Tinto, 2005).

Limitations

While the results of this study have practical applications for institutions to help with the transition and retention efforts of female military-affiliated students and helped fill a gap in the literature, the study had limitations. The first limitation of this study was the non-random sample of participants, as all students for this study were identified as military-affiliated, which included active-duty or veteran students at one university in the Southeastern United States and met

defined criteria. Therefore, the results are not generalizable to all student veteran populations. Secondly, it must be noted that our group of military-affiliated students was limited to those students who have military education benefits used to identify a student's military affiliation. This may overlook military-affiliated students who are not using or eligible for military education benefits.

A third limitation is that the data used in this study were limited to institutional data files. Other variables, such as socioeconomic, marital, or dependent status that were reflective of our theoretical framework, and key characteristics of our population, were not able to be used. The original study included a more detailed data set that would have provided a more robust analysis that closely aligned with the theoretical framework. Unfortunately, due to institutional challenges, the student data provided did not allow for the full analysis of the original study which limited the results. Included in the data was that the study was limited in examining persistence and graduation within five academic years, and did not capture students who may have continued their enrollment or graduated beyond these years. Finally, the data provided did not allow us to include all other ethnicities due to low numbers.

Implications for Future Research

The opportunities for future research are still great within the realm of military-affiliated student experiences and especially military-affiliated females. Firstly, this study could be conducted using more pre-entry attributes that are key to the female student: parental and marital status. Additionally, socioeconomic variables from the Free Application for Federal Student Aid (FAFSA), along with demographic information such as full- or part-time status, commuter, or resident status, along with additional service-related questions including rank, years of service, and years since enlistment would also provide valuable insight into the risk of stop out or dropout. With these additional variables, a more robust analysis could be provided to identify

segmented populations that may need additional or scaffolded assistance during their college careers, and better ascertain the influence of these variables on college persistence. Additionally, this research only addressed one facet of Tinto's Model of Student Departure: academic integration. Social integration, which examines the relationships between students and their peers and students and their faculty, is imperative to their social and professional success on campus (Vacchi et al., 2017). This is a missing piece that will add significantly to the body of literature related to military-affiliated females.

As many of the women-focused studies showed, the gendered military experience had a lasting impact on their civilian life and how they socially and academically engage on campus. Therefore, another recommendation for further research would be to use the Institutional Integration Scale which was developed to measure five facets of college student academic and social integration based on Tinto's Model of Student Departure. This would allow the researcher to obtain data on holistic integration, both academic and social, for female military-affiliated students.

Since female military-affiliated students have different needs than their male counterparts, future research could compare integration scores of females and males to inform policy and practice for this growing population. Contrasting female military-affiliated students' experience with that of male military-affiliated students could also demonstrate if the variables discussed in this study are unique to female student veterans or male military-affiliated students as well. Future research might also compare military-affiliated students to traditional undergraduates. Understanding how military-affiliated students differ from their peers will help to provide services to meet their unique needs. Research on teaching and learning with military-affiliated students should be supported to more closely examine ways academic and student affairs can help them succeed. Also, future research should consider the intersectionality of veterans' identities and recognize the multidimensional nature of identity characteristics.

Implications for Practitioners

As Tinto (1993) stated, for nontraditional students, “going to college is more frequently a matter of economic needs than it is a youthful rite of passage” (p. 76). This is also true for military-affiliated students who are either veterans enrolling post-deployment, or active-duty reservists. This current study adds to the understanding that, although female military-affiliated students’ lives might be complex due to transitional challenges, caretaking responsibilities, or work obligations, they still require the same support in and out of the classroom to persist.

As previously noted, while military-affiliated students have significantly different challenges than traditional and nontraditional students, they are not homogenous (Camacho, 2021; Vest et al., 2022) and require different types and levels of support (Hamrick et al, 2012). This study found that there were differences in stop out and dropout rates across different pre-entry attributes such as age, branch, and ethnicity. For example, older female military-affiliated students were marginally more likely to stop out than younger female military-affiliated students, while females enlisted in the Navy were 9.30 times more likely to stop out and Army were 2.14 times more likely to stop out than females who did not indicate their military branch. Additionally, the findings revealed Black/African American and Hispanic females have a higher stop out rate than their White peers, and Hispanic females were more likely to dropout when compared to White peers. To address these findings, it is essential to differentiate support to meet the needs of these intersecting roles and not offer a cookie-cutter solution to serving veterans (Vacchi et al., 2017).

Tinto (1993) supports that when institutions consciously connect with students, it can positively impact students' academic and social outcomes. Institutions can identify the needs of this diverse population by recognizing the benefit of recreating a mentoring system that military-

affiliated students are accustomed to (Camacho, 2021) with what the research says about minority students needing mentors (Musoba et al., 2013). Because mentoring is engrained within the African American culture, higher education institutions must acknowledge, prepare, give access to, and adequately support those students (Sinanan, 2016) who may need affirmation that they belong in higher education (Musoba et al., 2013).

For instance, academic units could establish a system that ensures every incoming first-year student is assigned to a senior student of the same racial background to develop a mentee/mentor relationship. The primary purpose of such mentorship is to bridge the transition into a college environment, encourage new students to be more socially proactive, and help them stay connected with peers on campus. For example, at West Virginia University, accepted minority students are matched with Black faculty, staff, and individuals in the surrounding community to serve as mentors which not only aid in student retention but provide personal and professional development for collegiate students (McClain et al., 2017).

Some military-affiliated students may have children making balancing school responsibilities difficult (Iverson et al., 2016). To manage this, institutions may offer childcare, counseling, or additional services to support. Female military-affiliated students may also not have the same excitement to be part of the institution as their younger peers and are less likely to engage outside of the classroom due to external responsibilities (Johnson et al., 2020).

Creating a welcoming space for military-affiliated females is essential for social and academic integration, as peer and faculty support can influence both areas of integration (Tinto, 1975, 1993). There are currently 1,500 Student Veteran Associations (SVA) at higher education institutions, with over 700,000 military-affiliated students participating (Johnson et al., 2020). Yet, many students are unaware of the resources and organizations available to them (Vest et al.,

2022). Fear of disclosing veteran status, whether their identity or participating in military events can result in students keeping to themselves instead of participating on campus (Vest et al., 2022) A military and veteran services office can consider hosting events specific to military-affiliated females to create stronger networks for them outside of the classroom. Additionally, discrepancies in stop out rates amongst the different branches and those who did not indicate their military branch, further supports the different lived experiences of female military-affiliated students and necessitate the need to provide differentiating support. Staffing military resources offices with veterans from multiple branches would provide camaraderie and support similar to the mentor/mentee relationships in the military (Camacho, 2021).

More significant efforts must be made to recognize and providing dedicated, differentiated, and appropriate programming for military-affiliated females (Albright et al., 2019). For these efforts to succeed, institutions must commit to eliminating the barriers that prohibit female military-affiliated students from persisting. Higher education institutions can prioritize the early transition experiences for female military-affiliated students by decreasing stop out and dropout by addressing areas of integration. For example, offering female veteran school orientations or transition courses (Vacchi et al., 2017) led by fellow military-affiliated females where healthcare and VA benefits information is provided or developing a transparent network for communication and support in student affairs, student support, and academic affairs.

McClain et al. (2017) found minority students had a better chance of persisting if they found a sense of community through participation in campus activities that focused on inclusion, like Greek life or heritage groups, which allowed students of color to explore their cultural identity. Integrating cultural spaces and experiences into new and existing institutional offerings exhibits the importance of celebrating students of all cultural identities.

Additionally, minority affairs, multicultural student engagement, and other minority-focused offices can create spaces of inclusion by collaborating with different student life and academic-focused offices to enhance students' acclimation to the university. Events like Black History Month and Hispanic Heritage Month, which minority affairs offices usually celebrate, can be organized in multiple offices to prevent social isolation or the stigma that only minority students can celebrate. Baker et al. (2012) stressed the importance

Recommendations for Future Research

This study did not indicate how often a student stopped out, only their current enrollment status during the fall 2022 semester. Additionally, it did not look at social integration, a key factor of a student's likelihood to persist (Tinto 1975, 1993). However, retention efforts to minimize stop out and dropout require efforts that address both social and academic integration. Using the Institution Integration Scale to measure social integration, along with demographic information including parental and marital status, enrollment status, commuter or resident status, GPA, as well as additional service-related questions including rank, years of service, and years since enlistment information would provide a more comprehensive and robust data set to identify barriers for both social and academic integration for military-affiliated females.

Additionally, the results of this study may lead other researchers to areas within the field to focus on a specific population within the female military-affiliated population. Focusing on ethnicity (Iverson et al., 2016), and digging deeper into the causes of higher stop out and dropout rates for Black/African American and Hispanic females would support other current avenues of research.

One study found strong and consistent negative impact of race-based discrimination and gender-based discrimination on mental health symptoms, for males and females, White and Non-

White in the Marines (Foynes et al., 2013). As many studies have shown, many military-affiliated students not only carry over the positive skills from the military like organization and dedication (Jones, 2013; Norman et al., 2015; Olsen et al., 2014; Pellegrino & Hoggan, 2015), but the trauma as well. Understanding the compounding effects of being a female person of color in the military further identifies female military-affiliated students' different experiences.

One area of future research would be the connection between retention and persistence rates and the support services provided for female military-affiliated students on campus. Do these support services benefit the persistence and retention of the specific needs of military-affiliated females? The researcher in this study was focused on making connections to pre-entry attributes and college persistence based on pre-existing data; however, a mixed-methods approach with a more robust survey may provide a more holistic view of the sample population (DiRamio et al., 2015; Taylor et al., 2016). The Institutional Integration Scale has been validated as a useful tool for assessing college students' level of academic and social integration with respect to interactions with faculty, peers, and the university environment (French et al., 2004); however, reaching out specifically to female military-affiliated students and listening to their stories and experiences will help ensure that all military-affiliated students will receive the support they need to succeed.

Summary

The body of research focusing on female active-duty or veteran students, while growing, remains limited. The current study, guided by Tinto's Longitudinal Model of Dropout (1975, 1993), allows for a close examination of the pre-entry attributes of female military-affiliated students and their relationship to college persistence at a four-year research university. The current study's findings can inform faculty, staff, and administrators about the factors affecting

stop out and dropout of this growing and underserved population, how to increase the likelihood of college completion, and how to create a safe space for military-affiliated females to thrive on campus.

REFERENCES

- Ackerman, R., DiRamio, D., & Mitchell, R. L. (2009). *Transitions: Combat veterans as college students. New Directions for Student Services, 2009*(126), 5–14.
<https://doi.org/10.1002/ss.311>
- Albright, D. L., Hendricks Thomas, K., McDaniel, J., Fletcher, K. L., Godfrey, K., Bertram, J., & Angel, C. (2019). When women veterans return: The role of postsecondary education in transition in their civilian lives. *Journal of American College Health, 67*(5), 479–485.
<https://doi.org/10.1080/07448481.2018.1494599>
- Aljohani, O. (2016). A comprehensive review of the major studies and theoretical models of student retention in higher education. *Higher Education Studies, 6*(2), 1.
<https://doi.org/10.5539/hes.v6n2p1>
- Anderson, L. (2021, December 13). *27 is the new 18: Adult students on the rise*. Ed Note.
<https://ednote.ecs.org/27-is-the-new-18-adult-students-on-the-rise/>
- Association for the Study of Higher Education. (2011a). What matters to veterans? Peer influences and the campus environment. *ASHE Higher Education Report, 37*(3), 21-33.
- Association for the Study of Higher Education. (2011b). Transition 2.0: Using Tinto's model to understand student veterans' persistence. *ASHE Higher Education Report, 37*(3), 35-50.
- Association for the Study of Higher Education. (2011C). Crisis of Identity? Veteran, civilian, student. *ASHE Higher Education Report, 37*(3), 53-65.
- Bagby, J. H., Barnard-Brak, L., Thompson, L. N. W., & Sulak, T. N. (2015). Is anyone listening? an ecological systems perspective on veterans transitioning from the military to academia. *Military Behavioral Health, 3*(4), 219–229.
<https://doi.org/10.1080/21635781.2015.1057306>

- Baechtold, M., & De Sawal, D. M. (2009). Meeting the needs of women veterans. *New Directions for Student Services*, 2009(126), 35–43. <https://doi.org/10.1002/ss.314>
- Baker, C. N., & Robnett, B. (2012). Race, social support and college student retention: A case study. *Journal of College Student Development*, 53(2), 325–335.
<https://doi.org/10.1353/csd.2012.0025>
- Barnett, D. R. (2014). *Academic and social integration of nontraditional students: The role of active learning strategies and sense of belonging in integration and persistence* [Unpublished doctoral dissertation]. Southern Illinois University, Carbondale, IL.
- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540.
<https://doi.org/10.3102/00346543055004485>
- Blackwell-Starnes, K. (2018). At ease: Developing veterans’ sense of belonging in the college classroom. *Journal of Veterans Studies*, 3(1), 1-19. <https://doi.org/10.21061/jvs.2>
- Blaauw-Hara, M. (2016). “The military taught me how to study, how to work hard”: Helping student-veterans transition by building on their strengths. *Community College Journal of Research and Practice*, 40(10), 809–823.
<https://doi.org/10.1080/10668926.2015.1123202>
- Braxton, J. M. (2011). Crisis of identity: Veteran, civilian, student. *Veterans in Higher Education*, 37(3), 53-65.
- Brown, T.A. (2015), *Confirmatory Factor Analysis for Applied Research*, 2nd ed., Guilford Publications, New York, NY.

- Bruce-Sanford, G., & Soares, L. (2019, April 29). *Mental health and post-traditional learners*. Higher Education Today. <https://www.higheredtoday.org/2019/04/22/mental-health-post-traditional-learners/>
- Buckley, M. (2021). Empowering female [student] veterans through community writing and experiential learning in the classroom. *Journal of Veterans Studies*, 7(2), 44–59. <https://doi.org/10.21061/jvs.v7i2.268>
- Camacho, M. M., Lord, S. M., Mobley, C., Main, J. B., & Brawner, C. E. (2021). Transitions of student military veterans into Engineering Education. *Social Sciences*, 10(6), 228. <https://doi.org/10.3390/socsci10060228>
- Campbell, C. M., & Mislevy, J. L. (2013). Student perceptions matter: Early signs of undergraduate student retention/attrition. *Journal of College Student Retention: Research, Theory & Practice*, 14(4), 467–493. <https://doi.org/10.2190/cs.14.4.c>
- Cate, C., & Davis, T. (2016). Student veteran demographics: Select results from student veterans of America Spotlight 2016. *SVA Spotlight*, 2(1), 1–7. [https://studentveterans.org/images/SVAS potlightBrief-1.pdf](https://studentveterans.org/images/SVAS%20spotlightBrief-1.pdf)
- The Center for Law and Social Policy. (2015). Yesterday's non-traditional student is today's traditional student. [Table]. Retrieved from <http://www.clasp.org/resources-and-publications/publication-1/CPES-Nontraditional-students-pdf.pdf>
- Choi, A. N., Curran, G. M., Morris, E. J., Salem, A. M., Curry, B. D., & Flowers, S. K. (2019). Pharmacy students' lived experiences of academic difficulty and Tinto's theory of student departure. *American Journal of Pharmaceutical Education*, 83(10), 7447. <https://doi.org/10.5688/ajpe7447>

- Cotton, D. R. E., Nash, T., & Kneale, P. (2017). Supporting the retention of non-traditional students in higher education using a resilience framework. *European Educational Research Journal*, 16(1), 62–79. <https://doi.org/10.1177/1474904116652629>
- Crossman, A. (2020, January 15). *Structural equation modeling*. ThoughtCo. Retrieved March 24, 2022, from <https://www.thoughtco.com/structural-equation-modeling-3026709>
- Dean, T., Sorgen, C. H., & Zinskie, C. D. (2020). Social integration of student veterans: The influence of interactions with faculty on peer-group interactions. *Journal of Veterans Studies*, 6(2), 20–29. <https://doi.org/10.21061/jvs.v6i2.188>
- Department of Defense. (2020, June). Office of the Chairman of the Joint Chiefs of Staff, DOD Dictionary of Military and Associated Terms. *DOD Dictionary of Military and Associated Terms*. <https://www.jcs.mil/Portals/36/Documents/Doctrine/pubs/dictionary.pdf>.
- Department of the Air Force. (2016). Air force guidance memorandum to AFI 36-2301, developmental education. Retrieved from https://static.e-publishing.af.mil/production/1/af_a1/publication/afi36-2656/afi36-2656.pdf
- Department of the Air Force. (2017). Air force guidance memorandum to AFI 36-2201, air force training program. Retrieved from https://static.e-publishing.af.mil/production/1/af_a1/publication/afi36-2616/afi36-2616.pdf
- Department of the Army. (2014). Army regulation 350-1: Army training and leader development. Retrieved from http://www.apd.army.mil/epubs/DR_pubs/DR_a/pdf/web/r350_1.pdf
- Department of the Navy. (2008). Marine corps order 1553.4b: Professional military education. Retrieved from <https://www.marines.mil/Portals/59/MCO%201553.4B.pdf>

Department of the Navy. (2018). Navy enlisted leader development continuum. Retrieved from https://www.navy.mil/cno/docs/NLDF_2.pdf

Department of Veterans Affairs. (2012, April 6). *Active Duty vs. Reserve or National Guard*. Veterans Employment Handbook.

https://www.va.gov/vetsinworkplace/docs/em_activereserve.html

Department of Veterans Affairs. (2020). *Post-9/11 GI Bill (Chapter 33)*. Veterans Affairs.

<https://www.va.gov/education/about-gi-bill-benefits/post-9-11/>.

DiRamio, D., Ackerman, R., & Mitchell, R. L. (2008). From combat to campus: Voices of student-veterans. *Journal of Student Affairs Research and Practice*, 45(1).

<https://doi.org/10.2202/1949-6605.1908>

DiRamio, D., & Jarvis, K. (2011). Women warriors: Supporting female student veterans. *ASHE Higher Education Report*, 37(3), 69-80.

DiRamio, D., Jarvis, K., Iverson, S., Seher, C., & Anderson, R. (2015). Out from the shadows: Female student veterans and help-seeking. *College Student Journal*, 49(1), 49-68.

Disabled American Veterans (DAV). (2014). *Women Veterans: The Long Journey Home*.

<https://www.dav.org/wp-content/uploads/women-veterans-study.pdf>

Dwyer, T. (2015). Persistence in higher education through student-faculty interactions in the classroom of a commuter institution. *Innovations in Education and Teaching International*, 54(4), 325-334. <https://doi.org/10.1080/14703297.2015.1112297>

Elliott, M. (2014). Predicting problems on campus: An analysis of college student veterans. *Analyses of Social Issues and Public Policy*, 15(1), 105-126.

<https://doi:10.1111/asap.12066>

- Ellis, H. (2019). A nontraditional conundrum: The dilemma of nontraditional student attrition in higher education. *College Student Journal*, 53(1), 24-32.
- Fernandez, F., Merson, D., Ro, H. K., & Rankin, S. (2019). Do classroom interactions relate to considerations of institutional departure among student veterans and service members? *Innovative Higher Education*, 44(3), 233–245. <https://doi.org/10.1007/s10755-019-9460-8>
- Finlay, B. (2007). Pawn, scapegoat, or collaborator? : U.S. military women and detainee abuse in Iraq . In T. McKelvey (Ed.), *One of the guys: Women as aggressors and torturers* (pp. 199–212). essay, Seal Press.
- Foyne, M. M., Shipherd, J. C., & Harrington, E. F. (2013). Race and gender discrimination in the marines. *Cultural Diversity and Ethnic Minority Psychology*, 19(1), 111–119. <https://doi.org/10.1037/a0030567>
- French, B. F., & Oakes, W. (2004). Reliability and validity evidence for the institutional integration scale. *Educational and Psychological Measurement*, 64(1), 88-98. <https://doi.org/10.1177/0013164403258458>
- Garger, J. (2020, January 29). *Latent Constructs in Social Science Research*. John Garger. <https://www.johngarger.com/blog/latent-constructs-in-social-science-research>.
- Georgia Southern University. (2022, August 17). *Military & Veteran Services: Military & Veteran Services*. Military & Veteran Services | Enrollment Management. <https://em.georgiasouthern.edu/military/>
- Gilardi, S., & Guglielmetti, C. (2011). University life of non-traditional students: Engagement styles and impact on attrition. *The Journal of Higher Education*, 82(1), 33-53. <https://doi:10.1353/jhe.2011.0005>

- Office, U. S. G. A. (2005). *Military personnel: Reporting additional servicemember demographics could enhance congressional oversight*. Military Personnel: Reporting Additional Servicemember Demographics Could Enhance Congressional Oversight | U.S. GAO. Retrieved from <http://www.gao.gov/products/GAO-05-952>
- Goldstein, J. S. (2009). *War and gender: how gender shapes the war system and vice versa*. Cambridge University Press.
- Great Schools Partnership. (2013, August 29). *Grade point average definition*. The Glossary of Education Reform. Retrieved from <https://www.edglossary.org/grade-point-average/>
- Grabowski, C., Rush, M., Kyle, R., Fayard, V., & Watkins-Lewis, K. (2016). Today's non-traditional student: Challenges to academic success and degree completion. *Inquiries Journal/Student Pulse*, 8(03). Retrieved <http://www.inquiriesjournal.com/a?id=1377>
- Griffin, K. A., & Gilbert, C. K. (2015). Better transitions for troops: An application of Schlossberg's transition framework to analyses of barriers and institutional support structures for student veterans. *The Journal of Higher Education*, 86(1), 71-97. <https://doi.org/10.1080/00221546.2015.11777357>
- Haecker, F. R. (2014). *Female Student Veterans Postsecondary Education Experience*. [Unpublished doctoral dissertation]. Brandman University
- Hammond, S. P. (2015). Complex perceptions of identity: The experiences of student combat veterans in community college. *Community College Journal of Research and Practice*, 40(2), 146–159. <https://doi.org/10.1080/10668926.2015.1017891>

Hammond, S. (2017). Student Veterans in higher education: A conversation six decades in the making. *New Directions for Institutional Research*, 2016(171), 11–21.

<https://doi.org/10.1002/ir.20191>

Hamrick, F. A., & Rumann, C. B. (2012). Addressing the needs of women servicemembers and veterans in higher education. *On Campus with Women*, 40(3).

<https://link.gale.com/apps/doc/A284222062/AONE?u=txshracd2619&sid=googleScholar&xid=4d0c65af>

Heagney, M., & Benson, R. (2017). How mature-age students succeed in higher education: implications for institutional support. *Journal of Higher Education Policy and Management*, 39(3), 216–234. <https://doi.org/10.1080/1360080x.2017.1300986>

Heineman, J. A. (2017). From boots to suits: Women veterans transitioning to community college students. *New Directions for Community Colleges*, 2017(179), 77–88.

<https://doi.org/10.1002/cc.20264>

Heitzman, A. C., & Somers, P. (2015). The disappeared ones female student veterans at a four-year college. *College and University*, 90(4), 16-19.

Hitt, S., Sternberg, M., Wadsworth, S. M. D., Vaughan, J., Carlson, R., Dansie, E., & Mohrbacher, M. (2015). The higher education landscape for us student service members and veterans in Indiana. *Higher Education*, 70(3), 535–550.

<https://doi.org/10.1007/s10734-014-9854-6>

Hittepole, C. (2019). Nontraditional students: Supporting changing student populations.

Retrieved from <https://www.naspa.org/images/uploads/main/Hittepole>

_NASPA_Memo.pdf

- Iverson, S. V., Seher, C. L., DiRamio, D., Jarvis, K., & Anderson, R. (2016). Walking a gender tightrope: A qualitative study of female student veterans' experiences within military and campus cultures. *NASPA Journal About Women in Higher Education*, 9(2), 152–168. <https://doi.org/10.1080/19407882.2016.1213644>
- Jenner, B. M. (2019). Veteran Success in higher education augmenting traditional definitions. *Journal of Ethnographic & Qualitative Research*, 14, 25–41.
- 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 Center for Policy Research and Strategy and Bloomington, IN, National Survey of Student Engagement. Retrieved from <https://www.acenet.edu/news-room/Documents/Student-Veterans-Service-Members-Engagement.pdf>
- Kirchner, M. J. (2015). Supporting student veteran transition to college and academic success. *Adult Learning*, 26(3), 116–123. <https://doi.org/10.1177/1045159515583813>
- Krichevskiy, D. (2014). Early coursework and college experience predictors of persistence at a Hispanic-serving Institution. *Journal of Hispanic Higher Education*, 13(1), 48–62. <https://doi.org/10.1177/1538192713513463>
- 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. <https://doi.org/10.2202/1949-6605.6292>
- Markle, G. (2015). Factors influencing persistence among nontraditional university students. *Adult Education Quarterly*, 65(3), 267–285. <https://doi.org/10.1177/0741713615583085>
- McClain, K. S., & Perry, A. (2017). Where Did They Go: Retention Rates for Students of Color at Predominantly White Institutions. *College Student Affairs Leadership*, 4(1).

- Molina, D., & Morse, A. (2017). Differences between military-connected undergraduates: Implications for Institutional Research. *New Directions for Institutional Research*, 2016(171), 59–73. <https://doi.org/10.1002/ir.20194>
- Morreale, C. (2011). *Academic motivation and academic self-concept: Military veteran students in Higher Education* (dissertation). ProQuest, Ann Arbor, MI.
- Mayo Clinic. (2018). *Post-traumatic stress disorder (PTSD)*. <https://www.mayoclinic.org/diseases-conditions/post-traumatic-stress-disorder/symptoms-causes/syc-20355967>
- McCaslin, S. E., Leach, B., E Herbst, & Armstrong, K. (2013). Overcoming barriers to care for returning veterans: Expanding services to the college campus. *Journal of Rehabilitation Research and Development*, 50(8). <https://doi.org/10.1037/e533652013-32>
- Muralidharan, A., Austern, D., Hack, S., & Vogt, D. (2016). Deployment experiences, social support, and Mental Health: Comparison of black, White, and Hispanic U.S. veterans deployed to Afghanistan and Iraq. *Journal of Traumatic Stress*, 29(3), 273–278. <https://doi.org/10.1002/jts.22104>
- Nagel, J., & Feitz, L. (2007). Deploying Race, Gender, Class, and Sexuality in the Iraq War. *Race, Gender & Class*, 14(3/4), 28–47.
- National Center for Education Statistics. (2002). *Nontraditional undergraduates/definitions and data*. <https://nces.ed.gov/pubs/web/97578e.asp>.
- National Center for Veterans Analysis and Statistics. (2013). *Women Veteran Profile*. https://www.va.gov/WOMENVET/docs/Women_Veteran_Profile5.pdf
- National Center for Veterans Analysis and Statistics. (2017). Women veterans report: The past, present, and future of women veterans. Department of Veterans Affairs. https://www.va.gov/vetdata/docs/specialreports/women_veterans_2015_final.pdf

- National Center for Veterans Analysis and Statistics. (2018). Age/gender [data set]. U.S. Department of Veterans Affairs. https://www.va.gov/vetdata/Veteran_Population.asp
- National Archives and Records Administration. (2022). (rep.). *Title 38 of the CFR* (p. 199). Washington , D.C.: National Archives.
- Nichols-Casebolt, A. (2012). The green zone: A program to support military students on campus. *About Campus*, 17(1), 26–29. <https://doi.org/10.1002/abc.21070>
- Norman, S. B., Rosen, J., Himmerich, S., Myers, U. S., Davis, B., Browne, K. C., & Piland, N. (2015). Student veteran perceptions of facilitators and barriers to achieving academic goals. *Journal of Rehabilitation Research and Development*, 52(6), 701-712. <https://doi.org/10.1682/JRRD.2015.01.0013>
- NSC Research Center. (2019). 2019, *National, Persistence, Postsecondary, Snapshot Report*. <https://nscresearchcenter.org/snapshotreport35-first-year-persistence-and-retention/>
- Office of the Federal Register, & Government Publishing Office (Eds.). (2020). *Electronic Code of Federal Regulations*. Electronic Code of Federal Regulations (eCFR). <https://www.ecfr.gov/cgi-bin/text-idx?SID=d5b70e50d53977598e2c7bf0dcd348dc>.
- Olsen, T., Badger, K., & McCuddy, M. D. (2014). Understanding the student veterans' college experience: An exploratory study. *Army Medical Department Journal*, 2014(4), 101-108. Retrieved from http://www.cs.amedd.army.mil/amedd_journal.aspx
- O'Neill, S., & Thomson, M. M. (2013). Supporting academic persistence in low-skilled adult learners. *Support for Learning*, 28(4), 162–172. <https://doi.org/10.1111/1467-9604.12038>
- Osborne, N. J. (2014). Veteran ally: Practical strategies for closing the military-civilian gap on campus. *Innovative Higher Education*, 39(3), 247-260. <https://doi.org/10.1007/s10755-013-9274-z>

- Pascarella, E. T., & Terenzini, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education*, 51(1), 60-75.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students*. Jossey-Bass.
- Pascarella, E. T., & P. T. Terenzini. (2005). *How college affects students: A third decade of research*. Volume 2. Jossey-Bass.
- Paulsen, K., & Boeke, M. (2006). *Adult learners in the United States: A national profile*. Washington, DC: National Center for Higher Education Management System.
- Pellegrino, L. & Hoggan, C. (2015). A tale of two transitions. *Adult Learning*, 26(3), 124–131.
<https://doi.org/10.1177/1045159515583257>
- Persky, K. R., & Oliver, D. E. (2010). Veterans coming home to the Community College: Linking research to practice. *Community College Journal of Research and Practice*, 35(1-2), 111–120. <https://doi.org/10.1080/10668926.2011.525184>
- Postsecondary National Policy Institute. (2021, September 26). *Post-Traditional Students in Higher Education*. Postsecondary National Policy Institute. <https://pnpi.org/post-traditional-students/>
- Postsecondary National Policy Institute. (2021). *Veterans in Higher Education*. Postsecondary National Policy Institute. <https://pnpi.org/veterans-in-higher-education/#:~:text=In%202018%2C%20over%20650%2C000%20veterans,benefits%20to%20pursue%20higher%20education.&text=In%202018%2C%2075%25%20of%20student,enrolled%20in%20two%2Dyear%20programs>.
- Quezada, T., Brunk-Chavez, B., & Posey, E. (2017). Connecting writing studies with online programs: UTEP's graduate technical and professional writing certificate program. In Monske, E. A., & Blair, K. L. (Ed.), *Handbook of Research on Writing and Composing in*

- the Age of MOOCs* (pp. 123-136). IGI Global. <https://doi.org/10.4018/978-1-5225-1718-4.ch008>
- Racchini, J. (2005). Enhancing Student Retention. *ATHLETIC THERAPY TODAY*, 10(3), 48–50.
- Rumann, C. B., & Hamrick, F. A. (2010). Student veterans in transition: Re-enrolling after war zone deployments. *The Journal of Higher Education*, 81(4), 431–458.
<https://doi.org/10.1353/jhe.0.0103>
- Schiavone, V., & Gentry, D. (2014). Veteran-students in transition at a midwestern university. *The Journal of Continuing Higher Education*, 62(1), 29–38.
<https://doi.org/10.1080/07377363.2014.872007>
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9(2), 2–18. <https://doi.org/10.1177/001100008100900202>
- Schmidtke, C. (2016). Improving workforce education learning outcomes: Lessons from soviet educator a. s. makarenko. In Wang, V. X. (Eds.), *Handbook of Research on Learning Outcomes and Opportunities in the Digital Age* (pp. 721-743). IGI Global.
<http://doi:10.4018/978-1-4666-9577-1.ch032>
- Schreiber, D., Agomate, J.-C., & Oddi, B. (2017). The Impact of Demographic Influences on Academic Performance and Student Satisfaction with Learning as Related to Self-Esteem, Self-Efficacy and Cultural Adaptability within the Context of the Military. *International Journal of Learning, Teaching and Educational Research*, 16(4), 67–90.
- Semer, C., & Harmening, D. S. (2015). Exploring significant factors that impact the academic success of student veterans in higher education. *Journal of Higher Education Theory & Practice*, 15(7).

- Shelton, E. N. (2012). A model of nursing student retention. *International Journal of Nursing Education Scholarship*, 9(1), 1–16. <https://doi.org/10.1515/1548-923x.2334>
- Sinanan, A. (2016). The Value and Necessity of Mentoring African American College Students at PWI's. *Africology: The Journal of Pan African Studies*, 9(8), 155–166.
- Smith, J. G., Vilhauer, R. P., & Chafos, V. (2017). Do military veteran and civilian students function differently in college? *Journal of American College Health*, 65(1), 76–79. <https://doi.org/10.1080/07448481.2016.1245193>
- Spoont, M., Nelson, D., Kehle-Forbes, S., Meis, L., Murdoch, M., Rosen, C., & Sayer, N. (2021). Racial and ethnic disparities in clinical outcomes six months after receiving a PTSD diagnosis in Veterans Health Administration. *Psychological Services*, 18(4), 584–594. doi.org/10.1037/ser0000463
- Student Veterans of America Research Department. (2021). *The 2020 SVA Census Survey: Student Veteran General Breakdowns*. Student Veterans of America. <https://studentveterans.org/wp-content/uploads/2021/04/SVA-Census-2020-Report.pdf>.
- Sullivan, K., & Yoon, K. (2020). Student veterans' strengths: Exploring student veterans' perceptions of their strengths and how to harness them in higher education. *The Journal of Continuing Higher Education*, 68(3), 164–180. <https://doi.org/10.1080/07377363.2020.1806013>
- Taniguchi, H., & Kaufman, G. (2005). Degree completion among nontraditional college students. *Social Science Quarterly*, 86(4), 912–927. doi:10.1111/j.0038-4941.2005.00363.x
- Taylor, A., Parks, R., & Edwards, A. (2016). Challenges on the front lines: Serving today's student veterans. *College and University*, 91(4), 47.

Teachman, J. (2007). Military service and educational attainment in the all-volunteer era.

Sociology of Education, 80(4), 359–374. doi.org/10.1177/003804070708000404

The Office of Veteran & Military Affairs. (n.d.) *Office of veteran and military affairs*.

<https://www.ncat.edu/campus-life/student-affairs/departments/veterans-and-military-affairs/index.php#:~:text=We%20assist%20eligible%20veteran%20students,benefits%20in%20a%20timely%20manner>.

Thomas, K. H., Taylor, S. P., Hamner, K., Glazer, J., & Kaufman, E. (2015). Multi-site

programming offered to promote resilience in military veterans. *Californian Journal of Health Promotion*, 13(2), 15–24. doi.org/10.32398/cjhp.v13i2.1820

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research.

Review of Educational Research, 45(1), 89-25. doi:10.2307/1170024

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

University of Chicago Press.

Tinto, V. (2006). Research and practice of student retention: What next? *Journal of College*

Student Retention: Research, Theory and Practice, 8(1), 1-19.

Tinto, V., & Cullen, J. (1973). Dropout from higher education: A theoretical synthesis of recent

research. *Dropout in Higher Education: A Review and Theoretical Synthesis of Recent*

Research, 45(1). <https://doi.org/10.3102/00346543045001089>

Ulrich, S., & Freer, B. D. (2020). From the military to college and beyond: Growing a

culturally sensitive program to support veteran success. *Journal of Clinical Psychology*,

76(5), 905–915. <https://doi.org/10.1002/jclp.22925>

University System of Georgia. (2022). *USG Facts*. University System of Georgia. Retrieved

from <https://www.usg.edu/>

U.S. Department of Veterans Affairs. (2010). VA.gov: Veterans Affairs.

<https://www.mentalhealth.va.gov/mentalhealth/msthome/index.asp>

Vaccaro, A. (2015). “It’s not one size fits all”: Diversity among student veterans. *Journal of Student Affairs Research and Practice*, 52(4), 347–358.

<https://doi.org/10.1080/19496591.2015.1067224>

Vacchi, D. T., & Berger, J. B. (2013). Student veterans in Higher Education. *Higher Education: Handbook of Theory and Research*, 93–151. https://doi.org/10.1007/978-94-017-8005-6_3

Vacchi, D., Hammond, S., & Diamond, A. (2017). Conceptual models of student veteran college experiences. *New Directions for Institutional Research*, 2016(171), 23–41.

<https://doi.org/10.1002/ir.20192>

Vest, B. M., Brimmer, M. J., Brady, L. A., & Homish, G. G. (2022). “I just wanna be another person at school”: Disclosing veteran identity on campus and effects on campus engagement. *Journal of American College Health*, 70.

<https://doi.org/10.1080/07448481.2022.2076106>

Vest, B. M., Hoopsick, R. A., Homish, D. L., & Homish, G. G. (2020). Mental health and educational outcomes among current and former National Guard and Reserve Soldiers.

Journal of American College Health, 68(2), 110–114.

<https://doi.org/10.1080/07448481.2018.1536056>

Volk, F., Floyd, C. G., Shaler, L., Ferguson, L., & Gavulic, A. M. (2020). Active duty military learners and distance education: Factors of persistence and attrition. *American Journal of Distance Education*, 34(2), 106–120. <https://doi.org/10.1080/08923647.2019.1708842>

- Wilson, K. B., Smith, N. L., Lee, A. L., & Stevenson, M. A. (2013). When the army post is the campus: Understanding the social and academic integration of soldiers attending college. *Journal of College Student Development, 54*(6), 628-642.
<https://doi:10.1353/csd.2013.0087>
- Wheeler, H. A. (2012). Veterans' transitions to community college: A case study. *Community College Journal of Research and Practice, 36*(10), 775–792.
<https://doi.org/10.1080/10668926.2012.679457>
- Wyatt, L. G. (2011). Nontraditional student engagement: Increasing adult student success and retention. *The Journal of Continuing Higher Education, 59*(1), 10–20.
<https://doi.org/10.1080/07377363.2011.544977>
- Xu, Y. J., & Webber, K. L. (2016). College student retention on a racially diverse campus: A theoretically guided reality check. *Journal of College Student Retention: Research, Theory & Practice, 20*(1), 2–28. <https://doi.org/10.1177/1521025116643325>

APPENDIX A

Letter of Approval



October 11, 2022

Institutional Review Board
Georgia Southern University
P.O. Box 8005
Statesboro, GA 30460

To Whom It May Concern,

Terezia Dean has requested permission to collect research data from Enrollment Management at Georgia Southern University through a project entitled "The Relationship of Social Integration to Educational Persistence for Female Student Veterans." I have been informed of the purposes of the study and the nature of the research procedures. I have also been given an opportunity to ask questions of the researcher.

The data requested includes enrollment variables for student veterans. The data can be provided to the researcher without parental permission under our Georgia Southern University Family Educational Rights and Privacy Act (FERPA) policy. The data will be provided to the researcher without student names, identification numbers or other identifiers.

As a representative of Georgia Southern University, I am authorized to grant permission to have the researcher utilize data from our school. The researcher has agreed to the following restrictions: provide a copy of published conclusions or results.

If you have any questions, please contact me at amysmith@georgiasouthern.edu.

Sincerely,

A handwritten signature in blue ink that reads "Amy D. Smith".

Amy D. Smith
Associate Vice President of Enrollment Management