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Active-Duty Women's Persistence in Online Undergraduate Degree Programs

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Walden University
2023

Abstract

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by

Tara L. Clawson-Inga

MA, National University, 2017

MA, National University, 2014

BA, National University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

November 2023

Abstract

This study explored the challenges to persistence among active-duty women in online

undergraduate degree programs. There is a gap in existing literature surrounding the

specific challenges that active-duty women face in persisting. The frameworks that

guided this research were Bean and Metzner's nontraditional student retention model and

Angelino and Natvig's conceptual model for engagement of the online learner. The

research question in this study addressed active-duty women's experience with

persistence in their online undergraduate degree programs. This qualitative research

design consisted of semistructured interviews with 13 active-duty women in the U.S.

military who are in online undergraduate degree programs. The data were hand-coded

and analyzed using an inductive analysis approach. Seven themes emerged surrounding

the experienced challenges towards persistence for active-duty women: (a) learning in an

online format, (b) gender differences/inequalities in the military, (c)

mental/physical/emotional health issues, (d) military occupation demands, (e)

deployments and movement, (f) family obligations, and (g) the need for increased

institutional support resources. With this knowledge, recommendations were made to

institutions and faculty that the knowledge be studied and actions be taken to adapt the

online learning environment to better support the challenges of active-duty women in

online undergraduate degree programs. These results may contribute to positive social

change by providing higher education administrators with insight into the experiences of

active-duty women. This information may support the development of programs or

services designed to assist active-duty women in overcoming challenges to persistence

and meeting their academic goals while serving their country.

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Dedication

This work is dedicated to my family. First, my father and inspiration, Nick Clawson, who has been watching over me from above through the completion of this program. Dad, you never ceased to encourage me toward my greatest potential, supported me in all my wild ideas, and always made me feel proud of who I am and could be. You raised me into the fierce, resilient, tenacious woman I am today, and I will pass your love of life and passion for greatness onto your granddaughters so that they will always know your spirit and strength.

Secondly, infinite gratitude for my husband, my rock, and my partner in this journey of life, Brooks Inga. Thank you for your patience, guidance, encouragement, and unwavering support. You are the greatest blessing, and I cannot thank you enough for your love and partnership and for never allowing me to give up on anything worth fighting for.

Lastly, to my two beautiful daughters, who made me a mother- the most difficult and rewarding job in the universe. Delilah and Aria, I hope that I make you as proud as you make me and that all I am able to show you in this world inspires your lifelong love of learning and exploration. Never give up your dreams or passions, and always carry my love with you on your many beautiful adventures.

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This is to all of my dissertation chairs and support staff at Walden University, who are focused, creative, and encouraging beyond measure. Dr. Ryan Theroux, you are one of a kind, and I extend my deepest appreciation for all of the time and effort you dedicated to helping me achieve this grand milestone in my life. Your positivity is infectious, and your support will forever be a part of who I am as an educator and researcher.

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Chapter 1: Introduction to the Study

The following research study addressed the topic of active-duty women in the U.S. military by exploring their challenges to persistence in online undergraduate degree programs. This research was necessary to better understand the unique challenges that members of this student population face while serving their families and country simultaneously. The results of this research can be used to inform the practices and resource development within institutions of higher education (IHEs). With awareness of the special challenges women in the military face, modifications to institutional support can be made to mitigate these challenges and to improve persistence and program completion among active-duty women.

The sections within this first chapter provide a summarized background on the topic, a stated research problem, and the overall purpose of this study. To support the purpose, Chapter 1 also includes the research question; the conceptual framework; the nature of the study, including research design and methodology; limitations to the study; significance of the findings; and a concluding summary.

Background

Since 2017, over $15 billion has been spent each year by government-funded military education programs on over 900,000 eligible military students in the United States (Ward & Wenger, 2022). The majority of these military students opt for online learning formats to accommodate their jobs and schedules (Deshpande, 2021). On average, 400,000 of these eligible students are degree-seeking, active-duty service members who are using the tuition assistance benefits through the Department of

Defense's Voluntary Education Program (Holian, 2020). No statistics are available regarding what percentage of these 400,000 are women, which presents a gap in the literature.

Student Veterans of America (SVA, 2014) documented that the majority of military-connected undergraduate degree students take 6 years to complete a bachelor's degree due to persistence issues. No recent studies have been found with newer statistics surrounding this completion timeline. The authors reported that the prolonged completion time resulted from many factors, both personal and military-related (SVA, 2014). What follows is a review of some of the reported challenges that have contributed to hindered persistence.

Some demographic characteristics commonly attributed to military students, such as being a first-generation student, working full-time, having a family, or having a disability, are among the associations that have led to the inability to persist (Remenick, 2019). Challenges to educational persistence identified by military students have included technology, interaction, deployment, and minimal institutional resources (Deshpande, 2021). Further research has also addressed difficulties such as interpersonal and social differences that make campus life a challenge to acclimate to for military-connected students (Jenner, 2019).

While these characteristics are reported for both male and female military students, female military personnel may experience increased challenges to persistence that are unique from their male counterparts such as gender-role expectations. According to Albright et al. (2019), some factors that contribute to the persistence statistics among

female military students include gender identity, enrollment intensity, having dependents, familial expectations, contentment with their chosen academic major, and stressors of their military jobs.

In 2013, the National Association of Student Personnel Administrators (NASPA, 2013) admitted that only 25% of U.S. institutions of higher education reported having a thorough understanding of the causes of challenges to persistence among their active-duty student populations. This report suggests that even though institutional leaders recognize the need to more effectively support active-duty students and student veterans, there is a limited understanding of how best to design support initiatives (NASPA, 2013). Even less (22%) of the institutions were tracking both retention and degree completion rates for active-duty military personnel (NASPA, 2013). These are the most recent statistics found surrounding this factor.

The last available figures, which are nearly a decade old, indicate that only 5% of U.S. higher education institutions had initiatives designed to address persistence among the active-duty population (NASPA, 2013). The limited amount of research that currently exists on this topic provides insight surrounding military students as an entire population and the challenges they exhibit compared to their traditional student counterparts. Overall, there is minimal research on the topic of persistence among active-duty women in online undergraduate degree programs.

Problem Statement

The problem is that the challenges surrounding persistence in online undergraduate programs among active-duty women in the United States are either

unknown or unacknowledged in the support programs provided at IHEs. No statistics are available regarding the persistence rate of female active-duty military personnel in undergraduate degree programs. Further, no prior research has explored the specific challenges faced by the female active-duty student. William-Klotz and Gansemer-Topf (2017) provided information relating military students in general to their challenges with persistence. The list included atypical work hours, demanding/stressful workloads and content, deployments/missions, physical injuries and mental health issues such as PTSD, frequent relocation of home and family due to changes in duty station, and financial burdens of low income and high output. This study connects the existing literature on nontraditional student populations such as military students with the conducted research on female active-duty students in online undergraduate degree programs.

Purpose of the Study

The purpose of this qualitative study was to explore the experiences of active-duty women with persistence in online undergraduate degree programs. Using an interpretivism research paradigm, this research consisted of semistructured interviews to gather and interpret data directly from participants to gain knowledge of their individual experiences and how these experiences affect their behaviors and outcomes. Interpretivism is concerned with how humans create deeper meanings through culture, environment, and circumstances over time, to develop different social realities. It aims for richness of insights among individuals (Kankam, 2019). With this information, institutional administrations can gain insight to develop support initiatives among faculty and staff that directly contribute to assisting this student population in overcoming unique

challenges and persisting toward academic success in online undergraduate degree
programs.

Research Question

RQ1:   What are active-duty women's experiences with persistence in their online
undergraduate degree programs?

Conceptual Framework

The concepts that supported this qualitative study were Bean and Metzner's
(1985) nontraditional student retention model, which originated and evolved from Tinto's
(1988/1993) interactionalist theory of student departure. In contrast to Tinto's
(1988/1993) theory, Bean and Metzner insisted that college/university campuses must
adapt their context to nontraditional students, such as active-duty women, for those
students to find success. The authors argued that the structure of support of nontraditional
students differs from that for full-time students and that it is more likely linked to factors
outside of their institution (i.e., linked to friends, family, or employers; Radovan, 2019).
In providing IHE administrations with this foundational understanding, coupled with the
data from this research, faculty and staff can be informed on how to change the status quo
and best support active-duty women in their online higher education pursuits.

The secondary supporting theory was Angelino and Natvig's (2009) conceptual
model for engagement of the online learner, which also stemmed from Tinto's
(1988/1993) interactionalist theory. Angelino and Natvig's model was beneficial to this
study because it offers a framework for strategies to engage online college students.
Research by these authors indicates that student engagement is a key strategy for

supporting persistence (Angelino & Natvig, 2009). Because the literature shows student engagement and acclimation to be a challenge for military-connected students (Deshpande, 2021; Jenner, 2019; Remenick, 2019), this framework supports that exploring this student populations' experience with persistence may present IHE administrations with informed opportunities to create specific, effective support programs that combat hindrance to online persistence.

There have been very few current conceptual models surrounding military students in the last 10 years (Vacchi et al., 2017). More recent models have tested and countered Tinto's (1988/1993) interactionalist theory by pointing out that his theory is more specific to traditional college students versus nontraditional students such as active-duty military. Therefore, in evolved models such as Bean and Metzner's (1985) model, the authors described that college/university campuses must adapt their context to nontraditional students for those students to find success. These authors stressed the external environment as a core relation to student persistence. Further, the authors claimed that the primary difference between persistence and attrition of traditional versus nontraditional students is that nontraditional students are more influenced by the external environment than by the social integration variables affecting traditional student attrition (Bean & Metzner, 1985).

Angelino and Natvig's (2009) conceptual model for engagement of the online learner focuses on increasing persistence and reducing attrition rates among online students. Their model presents various opportunities where engagement can occur between students, their peers, faculty/staff, and the institution within four strategic areas:

recruitment, course work, post-course work, and alumni relations (Angelino & Natvig, 2009). The Angelino and Natvig model can be useful in implementing specific practices by IHE administrations in these four strategic areas while considering the unique challenges of female active-duty students. If students' challenges or experiences can be associated with any of these four areas, this model can provide a framework that supports how institutions may assert engagement with these students that contributes to overcoming their persistence challenges. These two frameworks contributed to the development of the study approach and interview protocol (Appendix A) by asking questions directly related to participants' personal experiences.

These theoretical foundations supported my hypothesis, including that there is minimal understanding surrounding female active-duty college students and the unique challenges they face in online higher education persistence. There are also foundations developed within the literature that have already determined these are significant relationships among larger, less definitive populations of students. This idea is expanded upon further in Chapter 2 of this paper. Both frameworks are important to understanding the foundational nature of nontraditional student challenges and opportunities where IHE faculty and staff can use this knowledge to support active-duty women with persistence.

Nature of the Study

The nature of this study was a basic qualitative design intended to more deeply understand participants' experiences with persistence in online higher education programs using semistructured interviews. Through qualitative inquiry, it is possible to examine how individuals perceive and experience the world around them, while

capturing their thoughts, feelings, and interpretations of specific phenomena (Given, 2008). Qualitative methods guide researchers in asking *what*, *how*, and *why* questions regarding human behavior in natural settings to address key issues and controversies while generating detailed narrative descriptions (Patton, 2005). In this study, the key concept that was investigated was active-duty female students' experiences with online higher education persistence and the unique challenges they encounter. The basic qualitative research methodology was most appropriate for this study because the purpose was to explore specific, participant-based experiences within their natural, uncontrolled environments. These data directly answer the research question and provide insight to IHE administrations regarding the challenges that active-duty women face and how best to develop support initiatives.

Definitions

Female active duty: A person of female gender in a full-time occupation that is part of a military force (Antecol & Cobb-Clark, 2006).

Military-connected: The term *military-connected* is often used to characterize students who have current or prior military service, including active-duty, veterans, reservists, and national guard (Johnson & Appel, 2020).

Nontraditional student: Nontraditional students have been defined as students who meet some or all of the following characteristics: they postponed postsecondary education enrollment, are financially independent, work full time while enrolled, attend classes part time, have dependent(s) other than a spouse, are a single parent, do not live on campus, and attend in a nontraditional format such as online (Horn & Carrol, 1994).

Persistence: In the field of higher education, the term *program persistence* refers to the ability of a student to continue from one term to the next within a college degree program (Tippetts et al., 2022).

Assumptions

Assumptions are beliefs that cannot be proven but are necessary to conduct intended research (Simon, 2011). One assumption in this research was that female active-duty individuals would willingly participate in the interview process without coercion. A second assumption was that these participants were knowledgeable and would answer the interview questions based on their real experiences. A final assumption was that the participants would respond to the interview questions honestly, presenting their truths, not influenced by those of the researcher. These assumptions were based on the belief that participants would wish to contribute meaningful information that might address the gap in the literature and provide IHE administrations with the insight needed to develop informed support initiatives among faculty and staff.

Scope and Delimitations

The scope of this study was active-duty women students in the United States enrolled in online undergraduate degree programs. Understanding the experiences faced by this student population is important for IHE administrations when developing ways for faculty and staff to support these individuals based on their unique needs. There is no current research that addresses this phenomenon, leaving this population likely underserved and leaving IHEs with areas of opportunity for improvements in student services and persistence rates.

Delimitations are scope-limiting characteristics that define the boundaries of an intended study and are in the direct control of the researcher (Simon, 2013). This study was delimited to active-duty females enrolled in an online undergraduate program. Excluded were male students, nonmilitary personnel, brick-and-mortar students, graduate students, and students outside of the United States. The study framework captured the experiences of female active-duty undergraduate students and their unique challenges to persistence but did not investigate the experiences of students with the excluded characteristics, which were outside the scope and irrelevant to the purpose of this study.

Potential transferability includes the applicability and transfer of a study's framework to other scopes or target populations based on the context of the situation, the sample population, and the site where the research was conducted. The hypothesis was that specific nontraditional student populations have unique experiences regarding persistence and may require informed, tailored support systems by the administration of their institutions in order to find success in persisting. Using the design of this study, similar research can be conducted to investigate and explore the experiences of other nontraditional student populations. The sample size sufficiency, site parameters, and situational factors that are defined by the researcher would be tailored to the intrinsic features of the intended study (Vasileiou et al., 2018).

Limitations

Limitations are weaknesses within a research study that are out of the researcher's control (Simon, 2011). The only challenges to address in this study were the limitations surrounding the sample size of student participants and the time required to collect the

data. In qualitative studies, a smaller number of participants is preferred to study a phenomenon in depth (Gill, 2018). If the number of participants is too small, this may prevent the conclusive findings from being extrapolated (Faber & Martins Fonseca, 2014). This prevention may ultimately affect the dependability and transferability of the study's findings. Ways to mitigate this limitation are to recruit an appropriate number of participants (not too many, not too few) to achieve a sufficient amount of data that can be coded and themed to the point where no new themes emerge. For this study, I gathered data from 13 participants, which took a total of 9 weeks. This was more than double the amount of time I had intended for data collection. I had difficulties recruiting participants as well as hindrances with scheduling and rescheduling interviews for those I was able to recruit.

Significance

This study is significant to institutions of higher education and nontraditional female military students in their persistence. The research was carried out by collecting specific, informative feedback from students surrounding the unique experiences they face and how these experiences affect persistence in their online degree programs. These data are factors that directly contribute to helping IHE administrations develop informed support initiatives that help these students mitigate their challenges and persist in their educational pursuits.

This study may promote positive social change through its contribution to the literature and awareness of the experiences of a nontraditional student population in the field of higher education. This information can help institutional and educational

professionals make informed, meaningful changes. These changes may enhance the status quo and provide active-duty women with the resources needed to overcome challenges and persist in their online undergraduate programs as they further their education, raise families, and serve their country simultaneously.

Summary

The first chapter of this paper introduced a gap in the literature surrounding the challenges that active-duty women in the U.S. military experience toward online undergraduate program persistence. To address this gap, data were collected to answer the research question surrounding the experiences of female active-duty personnel and the challenges to persistence in their online undergraduate degree programs. This information will provide insight for IHE administrations to potentially make informed developments of support resources that assist this population in persisting in their online higher education programs.

This research was conducted via a basic qualitative study using an interview tool (Appendix A) shaped by the conceptual framework and existing literature surrounding this topic. The two presented frameworks guided the development of the study approach and interview protocol by asking questions directly related to personal experiences regarding challenges to persistence for this student population. This study may promote positive social change through its contribution to the literature and awareness in support of a nontraditional population in the field of higher education. This awareness may inform meaningful developments in programs or resources by IHE administrations to support active-duty women in persisting in online undergraduate degree programs.

      Chapter 2 is a review of the academic literature compiled during the research process. This literature review is grouped into key topics that surround the phenomenon of lower persistence rates in online undergraduate degree programs among female active-duty military personnel. The review includes an analysis of the literature and a summary of how the current context of literature may benefit from this research study.

Chapter 2: Literature Review

There is minimal research surrounding the challenges to persistence experienced by military students, particularly female military students. The purpose of this basic qualitative research was to explore the challenges that active-duty women encounter toward persistence in online undergraduate degree programs. What has been published in the last 3-5 years includes studies conducted largely on military veterans and on military students as a whole (male and female). This presents a gap that benefits from this research study by directly addressing the challenges faced by active-duty women in persisting in their online undergraduate degree programs.

A literature review is conducted to demonstrate a researcher's knowledge about a certain topic within a field of study, including history, theories, key terms/vocabulary, and methods (Randolph, 2009). The phenomenon under study within this research was understanding the experienced challenges to persistence among nontraditional female active-duty students. The literature review chapter includes the following major sections: (a) literature search strategy, (b) literature surrounding the conceptual framework, and (c) literature related to key concepts: nontraditional students, online undergraduate learning, U.S. military students, female military-connected students, persistence, challenges to military student persistence, and institutional resources and support. The chapter concludes with a summary and transition to Chapter 3.

Literature Search Strategy

The databases used to generate the listed research included Google Scholar, Thoreau via Walden Library, ESBCOhost, and ProQuest Central. To find the scholarly

publications and peer-reviewed resources, I used the following key terms in searches: *military*, *women in the military*, *female active-duty*, *military students*, *online courses*, *online learner engagement*, *undergraduate learners*, *student persistence*, *institutional support*, *attrition*, *veteran students*, *active-duty students*, and *female military persistence.*

All literature was stored and organized using a Zotero reference library. I included publications that were published within the last 6 years from the production year of this research (2017-2023). Ninety percent of the total resources were peer-reviewed journal articles, and the last 10% were scholarly books or other publications; this collection made up a total of approximately 200 references. In times of sparse production during the literature research process, my recourse actions were citation chaining, referring to the "related articles" algorithm, searching author profiles for related or relevant materials, and conducting library subject searches for keyword expansions.

Conceptual Framework

The phenomenon under study was the challenges to persistence experienced by active-duty women pursuing online undergraduate degrees. Active-duty military women are considered nontraditional and require unique, tailored support initiatives that acknowledge and focus on the specific challenges they face completing their degree programs in an online setting. The following frameworks describe how institutions must adapt their context to nontraditional students to assist those students through their challenges and help them find success in their educational pursuits. Additionally, engaging online learners is a concept presented that applies to this targeted population and supports this research purpose.

Bean and Metzner's (1985) Nontraditional Student Retention Model

Bean and Metzner's (1985) nontraditional student retention model originated and evolved from Tinto's (1975/1993) interactionalist theory of student departure. In contrast to Tinto's (1975/1993) theory, Bean and Metzner insisted that college/university campuses must adapt their context to nontraditional students in order for those students to find success. Bean and Metzner's model also included an additional factor of support in their concept that is external to the academic environment. This was articulated in Greenland and Moore's (2022) study that found that institutional support outside the classroom is crucial for nontraditional student retention and persistence (Greenland & Moore, 2022).

Bean and Metzner (1985) further noted that nontraditional students were more influenced by the external environment than by the social integration variables. Newer literature on military-connected students supports this model and indicates that the student experience is not prescriptive, linear, or homogenous. Instead, active-duty women require a specialized, differentiated experience to perform and persist (Vacchi et al., 2017), and their external environment differs vastly from a traditional student's external environment. These are differences that contribute to their experiences and challenges to persistence, making this research important in addressing this gap.

Bean and Metzner (1987) explained that nontraditional learners will often take advantage of opportunities given to them but are far less likely to ask for help on their own, even if the resources are available to them. This applies to active-duty women if (a)

the appropriate resources are available to them at their respective institutions and (b) they

have personal reasons why they may be apprehensive about asking for help when needed.

Angelino and Natvig's (2009) Conceptual Model for Engagement of the Online

Learner

The secondary theory was Angelino and Natvig's (2009) conceptual model for

engagement of the online learner, which also stemmed from Tinto's (1975/1993)

interactionalist theory. The Angelino and Natvig model presents various opportunities for

how and when engagement can occur between students, their peers, faculty/staff, and the

institution. Their model for engagement of the online learner consists of four strategic

areas: recruitment, coursework, post-course work, and alumni relations. Bean and

Metzner (1985) stressed the external environment as a core variable in relationship to

student persistence, while the Angelino and Natvig model can be useful in adapting this

environment by implementing specific practices in four strategic areas for online learners

such as those included in this study.

As a secondary theory, the Angelino and Natvig model recognizes the main

concept within Bean and Metzner's (1985) theory: that college/university campuses must

adapt their context to nontraditional students in order for those students to find success.

Their model introduced ways in which institutions can most effectively engage online

learners to support persistence and success. This framework has been referenced and

articulated in previous research such as Makowiak's (2019) study on teaching strategies

used by instructors to stimulate and sustain online learner engagement at the University

of Wisconsin-Stout. In this study, the author described strategies used by instructors to stimulate and sustain distance learner engagement (Makowiak, 2019).

As a framework, this model provides a foundational understanding that online learners have higher challenges to persisting than traditional in-seat students. In response, the key concepts within this model reinforce the idea that online learners require additional support and there are strategic opportunities for IHE administrations to apply research data and create innovative initiatives to mitigate these challenges and support online learner persistence.

Literature Review Related to Key Concepts

The phenomenon under study was the challenges to persistence faced by active-duty women pursuing online undergraduate degrees. The key concepts relative to this study included (a) nontraditional students, (b) online undergraduate learning, (c) U.S. military students, (d) female military-connected students, (e) persistence, (f) challenges to military student persistence, and (g) institutional resources and support. The literature in this section expands on research and data pertinent to these key concepts conducted within the last 6 years.

Nontraditional Students

In 2019, according to Migliozzi (2022), nontraditional students had a 1st-year persistence rate of 46.8%. Nontraditional students were defined by the same author as students who meet some or all of the following characteristics: They are 25 or older, they postponed postsecondary education enrollment, they are financially independent, they work full time while enrolled and attend classes part-time, they have dependent(s) other

than a spouse, they are a single parent, and they do not live on campus (Migliozzi, 2022). According to Hittepole (2019), the nontraditional student population is growing rapidly and now is the majority among students in higher education.

Studies by the U.S. Department of Education have shown that nontraditional student enrollment is consistently growing. In 1986, about 65% of undergraduate students were nontraditional, and by 1992, that statistic grew to 70% (Horn & Carroll, 1996). By 2012, this percentage increased again to 74% (Radford et al., 2015). According to the most recent statistics (2021), 85% of college learners are nontraditional students (National Center for Education Statistics [NCES], 2022). Cahalan et al. (2021) reported that 80% of nontraditional students are enrolled part time, 43% have children/dependents, 28% are single parents, and 41% work full time simultaneously. These students are further characterized by high levels of financial need; 50% will not receive a degree within 6 years, and most will have significant student debt (Cahalan et al., 2021).

Nontraditional students are more likely to take advantage of online higher education than their traditional student peers (Ren, 2022). In 2021, 80% of students enrolled in online programs were considered nontraditional. However, nontraditional students often drop out of online degree programs and have lower completion rates than their traditional counterparts (Miller, 2014; Ren, 2022). A lack of knowledge about the nontraditional student population has led to increased attrition rates, leaving some IHEs, especially for-profit institutions, struggling to make enrollment numbers. The overall attrition rate of online courses was noted as 10–20% higher than that of in-person courses (Christensen & Spackman, 2017). In the for-profit sector alone, nontraditional students

account for about 78% of enrollments and have a 67% dropout rate before completing a degree program (Arbeit & Horn, 2017).

Nontraditional students typically cannot alter their lives to fit the schedules of some IHEs, so they opt for institutions where the programs, delivery model, student services, and faculty can adjust to their needs and lives (MacDonald, 2018). Without appropriate support measures, nontraditional learners feel marginalized and disengaged in their online programs. Therefore, it is necessary for instructors and administrators to impart effective strategies that support the experiences of nontraditional learners (Jiang & Koo, 2020; MacDonald, 2018).

In today's retention-focused higher education environment, institutions and administration have directed much of their attention to success among nontraditional students. However, little research has been conducted on this population, particularly on their persistence in degree programs (Ellis, 2019). Steinhauer and Lovell (2021) studied the perceptions of nontraditional students as they pertained to academic motivations, struggles, and successes. The authors found four themes that resonated: (a) time is an obstacle for nontraditional students, (b) nontraditional students value comfortable connections with other nontraditional students versus with traditional students, (c) nontraditional students value effective support systems on and off campus, and (d) their motivation for powering through is the rationale for returning to higher education (Steinhauer & Lovell, 2021).

Online Undergraduate Learning

Online learning has many noted advantages, such as accessibility, flexibility, and personalization (Kebrichi et al., 2017). Xie et al. (2020) reported that in 2018, 35% of 5.7 million enrolled undergraduate students were taking at least one course online. These students mentioned advantages such as reduced expenses, time-saving schedules, and becoming tech-savvy (Xie et al., 2020). Online learning requires 40% to 60% less time learning than traditional classrooms, and one study by Pei and Wu (2019) suggested that online learning is equal or superior to traditional learning (Pei & Wu, 2019). Lastly, online education is believed to be a critical part of the long-term global education strategy (Mohamed Hashim et al., 2021).

Online course management requires an evidence-based strategy to maintain effectiveness. In online learning environments, course retention and persistence of students have been significantly lower than in traditional brick-and-mortar classrooms (Afzal, 2020). Afzal (2020) found three factors that were equally as important in student academic outcomes in online education: student engagement, self-regulation, and teacher feedback.

The first factor that Afzal (2020) described was student engagement. In previous research, engagement was noted as one of the more crucial factors that influenced online students' learning experiences and persistence. Engagement was reported to motivate learners, reduce isolation, and promote academic achievement (Martin & Bolliger, 2018). Britt (2015) concluded that the best way to maintain engagement among adult learners was to base learning on real-world scenarios and allow them to use their personal

experiences as knowledge in order to connect with the course material. This concept is especially important with female military learners who have different world experiences from their traditional and male counterparts.

      The second factor that impacted student outcomes in online education was self-regulation and social presence (Afzal, 2020). Nontraditional students bring different perspectives and skill sets to the online learning realm than do their traditional counterparts. One of these skills is self-regulation, a "meta-cognitive" skill that relates to how one behaves in a stressful environment (Afzal, 2020). Female military students embrace different stressors in their environment that shape their knowledge and experience. Their self-regulation and social presence appear different than those of traditional and/or male students. This research uncovered these stressors and how they relate to female military students' experiences, skillsets, and social presence in environments outside of the military.

      The third factor was teacher feedback (Afzal, 2020). The online presence of the instructor is important to connect students with the material and to help them stay focused and engaged (Afzal, 2020). Martin et al. (2018) also noted that casual, infrequent teacher–student interactions have a negative impact on academic outcomes. This claim shows why it is important for instructors to understand the insights of active-duty women. These students exhibit unique needs regarding how they connect and communicate, as well as what they need from their instructors to increase their ability to persist in their online programs.

Instruction in Online Undergraduate Programs

While some IHE leaders believe that all instructors should be able to teach in any modality, Scherer et al. (2020) indicated that there is no one-size-fits-all approach to online instruction. The rapid transition to online instruction for many postsecondary instructors during the COVID-19 pandemic surfaced a gap in the literature pertaining to instructor readiness for approaching effective online instruction (Cutri & Mena, 2020). Scherer et al. found that there are several variables that determine the preparedness of instructors to effectively conduct online courses: gender, previous online teaching experience, context of the online teaching shift, and cultural orientation (Scherer et al., 2020).

Current research has suggested that faculty who teach in online programs must be able to effectively manage a digital setting, and training is an imperative factor in preparing instructors for the management process (Kim et al., 2021). Lockman and Schirmer (2020) researched effective, evidence-based instructional practices for online higher education and found that effective strategies in online instruction include the use of multiple pedagogies and learning resources to address different student learning needs, increased instructor presence and engagement that exceed the bare minimum, quality of instructor–student interactions, academic support outside of the classroom, and promotion of classroom cohesion and trust (Lockman & Schirmer, 2020). These researchers also emphasized the importance of user-friendly technology, an orientation to online instruction, opportunities for synchronous learning sessions, and incorporation of social media (Lockman & Schirmer, 2020).

Engagement and communication in online education are multi-dimensional according to Vlachopoulos and Makri (2019). These researchers took a different approach to their research and produced a framework that focused on the multi-dimensional aspects of communication and engagement in online learning environments. The authors posited seven best practices to support the academic success of online learners in higher education: (a) encouraging student–tutor contact, (b) reciprocity and peer cooperation, (c) active learning, (d) prompt feedback, (e) time spent on a task, (f) communicating high expectations, and (g) respect for diverse ways of learning.

The literature in this section highlights recent research that has been conducted on the many facets of instruction and engagement of online learners. Researchers have presented best practices that can support success in an online learning environment when coupled with proper training and knowledge of their student population's learning styles. This idea is important for teaching military women who exhibit different behavior in the online classroom than their traditional or male counterparts and require specialized considerations based on their experiences.

U.S. Military Students

The number of U.S. military students is once again increasing. According to the Veteran's Affairs (VA) Annual Benefits Report, 909,320 beneficiaries used their education benefits amounting to $12 billion across six benefit programs (VA, 2019). Many of today's IHEs compete for military students, particularly for-profit IHEs who promote fast, flexible degree plans. Some IHEs even have programs specifically designed exclusively for military students. To be able to track and support military students, they

must be identifiable in student databases. For example, there must be a military affiliation question included in the demographic section of their application since not all military students will use military financial benefits and not all military students have the opportunity to disclose their status. Without accurate data on military presence, it is difficult to justify appropriate resources and programming to support this student population.

The experiences of U.S. military students have differed historically. Older research has demonstrated a homogenous design in the postsecondary student experience. For example, Gleazer (1980) claimed that college and university policies and procedures should recognize that learners of different ages and developmental stages can effectively learn side by side. Noel (1985) attributed effective persistence to having a good career planning program. Weidman (1985) claimed that nontraditional student persistence was not attributed to personal background characteristics but to academic aptitude.

In comparison, newer student research published within the last 5 years has avoided homogenizing the unique college experiences of nontraditional students such as military students (Borsari et al.; 2017, Camacho et al., 2021; Chiara et al., 2020; Deshpande, 2021; Gibbs et al., 2019; Vacchi et al., 2017). For IHEs with a high volume of military-connected students, understanding how these students perceive services specifically designed for them is a crucial step in developing effective programs and service models (Morris & Albanesi, 2019). Williams-Klotz and Gansemer-Topf (2017) identified that demographic characteristics, campus relationships, financial situations, and personal experiences were all factors attributed to military students' academic success.

When military students recognize these important factors, they can use the information to make informed choices about where they choose to further their education.

When selecting a college degree program, Hornor found that military students considered 4 key factors: perception of cost and the financial aid offered to them, the academic program offerings available, the flexibility of scheduling, and the academic advisement from military-familiar counselors (Hornor, 2022). Once an IHE selection is made, military student persistence is dependent upon the perception of their satisfaction with the academic experience, their ability to manage their education with other life obligations, and the institutional offerings that support their efforts while mitigating their challenges (Deshpande, 2021).

Deshpande (2021) explained that the majority of military-connected students felt comfortable in their online programs but did not have access to direct engagement with other military students. Jenner (2019) indicated that military students have shown that linking with military-connected peers is an important part of the college experience, however, the nature of these peer connections has yet to be researched (Jenner, 2019). Deshpande also categorized the challenges faced by military students as time management, family/personal/medical issues, technology issues, work-life management, college-specific issues, and financial aid issues (Deshpande, 2021). Volk et al. collected data from 2,246 undergrad students from a single university in the Southeastern region of the United States. Their findings indicated that a large portion of the variance in persistence and challenges was based upon the branch of service of the participants.

These results suggest that the different branches provide different levels of support for active-duty education (Volk et al., 2020).

William-Klotz and Gansemer-Topf explored the correlation between the experiences of military students (specifically personal, academic, financial, and social) and their academic success [GPA]). These correlations included 5 factors that directly contributed to student academic achievement (GPA): race, private versus public institutions, eligibility for military financial programs, meeting faculty expectations, and feeling of preparedness (William-Klotz & Gansemer-Topf, 2017).

It is important to explore the differences in how military students learn in online programs. Administrators in IHEs may be unaware of these differences. This knowledge is needed to implement resources that support the needs of military-connected students, especially women (Chiara et al., 2020).

Female Military-Connected Students

In this research, female military-connected students were any female-gender college students who are or have previously been employed by any branch of the U.S. military including reservists and National Guard. Military service and associated educational benefits (tuition assistance and veteran benefits such as the Post 9/11 GI Bill) have led female military-connected students to access their education benefits at the highest rate in history (Albright et al., 2019). One in 5 active-duty military students in college are female and the average entry age is 22 years old (Molina & Morse, 2017).

Challenges for Females During Military Service

Engagement in military occupations has historically been a challenge for women. Traditionally masculine values throughout military culture and society create a multifaceted environment for female service members (Moore, 2020; Pawelczyk, 2016). Van Gilder (2018) posited that based on interviews with 29 military persons, hegemonic masculinity was reinforced in day-to-day communications in the military and that femininity is considered a threat to military effectiveness (Van Gilder, 2018). A recent study among military academy students found that up-and-coming military leaders are opposed to women serving in nontraditional roles within the military (Laurence, 2017). Moore (2020) added that sex segregation in military occupations can be a factor for women not advancing through the ranks as quickly as men, which can ultimately hinder their career progression.

Baumann et al. explored gender-specific challenges that women faced during military service. A sample of 750 Army women identified experiences during military service such as non-voluntary discharge from service, holding a lower rank during service, having their first child during military service, leaving the military against their will, experiencing post-traumatic stress disorder (PTSD) or other physical/common mental health disorders (CMDs), or loneliness (Baumann et al., 2021).

Keller et al. focused on better understanding the factors that influenced female Air Force officers' retention as active-duty Air Force. The researchers identified key factors through focus groups and provided recommendations for developing and improving Air Force policies and programs that addressed challenges to female Air Force officer

retention. The retention barriers for female Air Force officers were categorized into four areas: family and personal issues, career challenges, work environment challenges, and broader Air Force and military-related issues (Keller et al., 2019).

The goal of gender inclusivity in the U.S. military is complex and there are many normative and practical issues that have yet to be resolved. Matters pertaining specifically to women in the military are the emphasis of many government committees. One such committee is the Defense Advisory Council on Women in the Services (DACOWITS), which serves the Secretary of Defense on all matters regarding women in the U.S. military (Moore, 2020). The literature in this section provides a number of hindrances that women face during active-duty military service as differentiated by occupations, branch of service, and extant masculine ideals. These factors ultimately affect the experiences and character of military-connected females and may persist as challenges when they go on to pursue higher education.

Challenges for Female Military-Connected Students

The challenges for female military students differ from the general research that exists on male and female military students together. There is minimal research specific to active-duty women in undergraduate degree programs. However, there has been some recent research on female veteran students in undergraduate degree programs. Albright et al. surveyed female veteran students regarding their experiences with student outreach received at their IHEs. The results indicated that female military-connected students received health information from their IHEs less often than female students with no military connection on the following topics: stress reduction, depression and anxiety,

alcohol and other drug use, sexual assault, and relationship violence prevention (Albright et al., 2019).

Strong et al. noted some circumstances that can either support or hinder female veterans' higher education experiences: (a) availability of gender-specific veteran's affairs policies and services, (b) access to education and fair employment opportunities, (c) support specific to mental health and/or sexual trauma, and (d) social stigmas associated with being a female military veteran (Strong et al., 2018).

As military-connected women pursue higher education, this literature provides details on challenges they face during their programs. These insights are important for IHE administrators to understand and consider when developing programs that support the persistence of this unique student population.

Persistence

Persistence is not only important for higher education leadership to understand but, according to Tinto (2006), it is also one of the most studied areas in higher education today. However, despite several decades of research on the topic of persistence (Bean & Metzner, 1985; Carr, 2000; Herbert, 2006; Simpson, 2003; Spady, 1971), no significant progress has been made (Radovan, 2019).

Stone and Springer (2019) noted that persistence rates for online students are lower than those for students who attend classes on campus. The evidence suggests that the isolation of online classes combined with the challenges of technology, academic expectations, and stressors from other areas of students' personal lives, are just a few of the factors that contribute to this lower rate of persistence. In a study by Kara et al., the

researchers found that adult learners' persistence in online education programs can be increased with informed provisions and guidance (Kara et al., 2019).

According to Tinto (2017), persistence is driven by a student's motivation to complete an educational goal. After students begin a program, persistence is influenced by internal and external factors including the individual needs of the student (Armstrong et al., 2021). Burke (2019) suggested that nontraditional students fail to persist in higher education for two primary reasons: personal obligations and perceived social obstacles. This population often finds their academic needs competing for priority with their careers or personal lives.

Tinto's (1986) model of student departure suggested that "students engage in a longitudinal process of interacting with the formal and informal social and academic components of the institution and the culture…The student ultimately decides either to stay involved or to leave the educational environment. This decision is influenced by a student's academic and social experiences. Those who are able to integrate most fully into the academic and social realms of the institution form stronger commitments and are more likely to persist" (Andrade et al., 2022, p. 318).

Remenick conducted a review of the historical literature of 4 time periods where nontraditional students persisted and the services or support that were offered to them. Remenick found that common among the four time periods were three ways that nontraditional student persistence was supported: (a) institutions awarded credit for nonacademic activities, b) institutions increased flexibility in their policies and

procedures, and (c) institutions provided resources specific to nontraditional students'

needs (Remenick, 2019).

Challenges to Military Student Persistence

Over 60% of U.S. military college students have at least 4 risk factors that may

hinder their ability to persist in school (Molina & Morse, 2017). William-Klotz and

Gansemer-Topf (2017) presented 5 themes relating to military students and their

challenges to persistence. These themes included atypical work hours,

demanding/stressful workloads and content, deployments/missions, physical injuries and

mental health issues such as PTSD, frequent relocation of home and family due to

changes in duty station, and financial burdens of low income and high output. These

factors place military students in a position within higher education where traditional

resources and support might not be enough to support their persistence.

Alschuler and Yarab found themes that arose which included challenges with

transitioning between military and civilian life, challenges with how to manage multiple

identities, and attitudes towards faculty, nonmilitary peers, and staff (Alschuler & Yarab,

2018). Le Menestrel and Kizer posited a similar conclusion that military work can be

challenging in both hindering and growth-enhancing ways. Some of the less ideal

challenges include heavy workloads, particularly if they seem to be relentless and

unimportant, or are perceived by the service member as "busy work" assigned by poor

leadership personnel. Some have also reported long hours, understaffing, stressful work,

and frequently being called away from home for training and/or deployments (Le

Menestrel & Kizer, 2018).

Active-Duty Military Occupations

Today, women are permitted in over 90% of all active-duty, military occupational specialties (MOSs) in each of the branches of service (Segal et al., 2018). Despite cultural and institutional barriers, women are beginning to achieve greater seniority and leadership opportunities across the branches. With these increased opportunities comes increased expectations, responsibilities, and occupational challenges and risks (Moore, 2020). Active-duty women must maintain work performance to defeat gender stereotypes, achieve promotions, and support their own career advancement. When coupling this with higher education pursuits, active-duty women have the increased stress and pressures to perform and meet the demands of all assumed responsibilities and obligations.

Deployments

In 2013, women were no longer restricted from serving in combat zones (U.S. Department of Veterans Affairs, 2017). Deployed women often served in the same combat zones as men, were accountable for the same responsibilities, endured the same injuries, and were in leadership positions (Sikes et al., 2020). Eagen (2019) explained that since 2000, the number of women serving in the U.S. military has increased by 17%. As more women enlist in the military, more are deployed to combat operations.

The interruption of educational persistence due to deployment is exclusive to military students and causes disruptive, life-altering transitions (Ackerman et al., 2009). Today, IHEs are not permitted to serve on overseas military facilities or ships at sea due to a lack of government priority (Pulkkinen, 2021). Military students must abruptly

depart from active semesters of school to deploy and later return having to figure out how to reengage in their educational process (Renn & Reason, 2013).

According to Gibbs et al. (2019), military students who have deployed have a unique perspective compared to their comrades who have not deployed. These perspectives are represented by a "5-phase emotional cycle of deployment:" (a) the predeployment feelings of anxiety, anticipation, denial, and mental/physical distance, (b) the deployment phase, which may include loneliness, sadness, and being overwhelmed with new responsibilities (c) the sustainment phase of new routines, independence, and confidence (d) the redeployment phase in anticipation of going home, having both excitement and apprehension, and (e) the postdeployment phase composed with the negation of deployment routines and reintegration into home routin. Students going through the 5 emotional phases of deployment are doing so while also meeting the expectations of college student life.

Military mothers who face deployment are constantly facing the challenges of competing roles between home and deployment assignments. One specific challenge is the disruption of their home routines which may include spousal responsibilities, parenting responsibilities, household responsibilities, and persistence in their academic pursuits (Walsh, 2017). The hindrance of military deployments has shown to be disruptive to higher education pursuits for military students, with increased factors for women as described in the literature in this section.

Frequent Relocation (Permanent Change of Station [PCS])

Active-duty military personnel relocate every 3 years on average, which can have

an impact on their ability to persist in educational pursuits. While very little research has been conducted specifically regarding the effect of frequent relocation on academic persistence, one existing study indicated that frequent moves during service may be a significant contributor to increased psychological distress for military service members (Ribeiro et al., 2022, Tong et al., 2018). Other potential problems related to frequent relocation include barriers to consistent health and mental health care, potential decreases in social support for all family members, and academic disruptions for those in school (Ribeiro et al., 2022). It is important for IHEs to understand the impact of frequent relocation and be able to mitigate this challenge by providing flexible options and continuity of consistent support resources.

Posttraumatic Stress Disorder (PTSD) and Other Mental Illnesses

Many of today's military service members are underserved when it comes to mental health support due to systematic challenges such as barriers to access, health providers lack of knowledge regarding service members' mental health injuries and needs, and the stigma-related reluctance for service members to reach out for help (Kalmbach & Moore, 2020).

Military-associated mental illnesses such as posttraumatic stress disorder (PTSD) have been noted by several researchers as one of the challenges military students face in their online education pursuits. Military students who engaged in combat during their service are twice as likely to have a disability or mental health issue than college students (Cox, 2019). O'Connor et al. (2018) conducted a case study on 36 participants to assess academic functioning, satisfaction, and the needs of military veteran students who

accessed the Veteran's Health Administration (VHA) and Student Veteran Health Program (SVHP). In this case study, the authors reported specific details of challenges that this student sample faced as a result of mental health issues attributed to military service. The report included retention of information, meeting assignment deadlines, and socialization issues with other students.

Williston and Roemer (2017) examined predictors of well-being, which included quality of life and academic engagement, in a sample of student service members and veteran college students. The researchers surveyed 87 active-duty and veteran military personnel regarding postdeployment social support, emotion regulation skills, psychological distress, academic engagement, quality of life, and demographics. In their findings, the authors reported that social support and emotion regulation skills may be useful targets for health promotion and intervention efforts for military-connected students.

McDermott et al. (2017) addressed a gap having to do with the self-stigma experienced by military-connected students and their willingness to seek professional help for their mental health. The researchers surveyed 349 veterans with combat experience, on their conformity to norms of self-reliance and emotional control and their possible associations with the self-stigma of seeking help. In their findings, the authors discovered that those with combat experience in war zone deployments may experience feelings of guilt, shame, and self-stigma when it comes to seeking help.

Rattray et al. (2019) showed that military-connected students with possible PTSD reported having an increased need for health services than students who do not have

PTSD. This author also noted that many military-connected students are not uncomfortable with admitting to having PTSD and do not pursue any services on their IHE campus.

Parenthood

For women in the military, an additional factor might include motherhood while on active duty. This factor creates an additional challenge to persistence and a potential need for specialized support and resources. Females make up 71% of all student parents and 79% of single student parents (Cruse et al., 2019). Twenty-six percent of all students in higher education in the United States have children. The majority of enrolled female student parents say that the activities that take up most of their time are child/dependent care, followed by work, and, lastly, school (Cruse et al., 2019).

The challenges of military motherhood are accompanied by stereotypes in military culture. Hampson conducted in-depth interviews with 48 women from 2 work environments (the U.S. military and academia), and found that stereotypes in these fields have established the identity of a working mother as not an ideal worker (Hampson, 2018). More specifically, mothers in the U.S. military do not fit the ideal worker image because the ideal worker in a military environment is one who is physically fit and always ready to report for duty when called on. A pregnant service member or mother does not fit this model in that she is perceived to receive "special treatment" (Hampson, 2018). The information provided in this section of the literature adds a challenge to female military students' pursuit of higher education when learners are required to

overcome cultural and societal stereotypes in conjunction with the true challenges of motherhood.

Gender Roles

Gender roles are used to describe certain attributes that differentiate men and women; attributes that have a feminine version and a masculine version that are significantly more often associated with one or the other (Eisend, 2019). Gender role conflicts experienced by student mothers have been shown to have had negative effects on both family and college persistence (Kensinger & Minnick, 2018). Osam et al. (2017) also noted that gender roles (such as roles related to the domestic environment) could cause a greater risk factor for female students. This detail may be especially true for female students with young children; the added stress of gender roles may also lead to lowered female student persistence.

Huffman et al. discussed how married military mothers are in a unique position because they have to navigate many tensions such as tensions between masculinity and femininity and tensions between work and home. When married military mothers deploy and are separated from their homes, changes in household roles take place. When they return from their deployment, they must communicate with their spouses to reestablish household and parenting roles (Huffman et al., 2017). This factor creates distinct challenges for married military women with children, especially those balancing higher education simultaneously.

Institutional Resources and Support

Despite the rapidly increasing presence of nontraditional students in higher

education, Hittepole (2019) claimed that only 58% of IHEs currently have nontraditional

support services. Iloh (2018) noted that many higher education institutions design their

infrastructure around the traditional students who will enter right out of high school.

Many of these IHEs have policies in place that also focus on the traditional student

experience and expectations. Much of what we understand today about student services

within IHEs is largely a result of research focused on traditional college students. While

these efforts have provided important information that has guided the field of higher

education, they are fundamentally limited by their narrow focus on students with

traditional trajectories. Continued focus on traditional-aged students will only weaken the

ability to advance 21st-century higher education practices. The lack of research on

nontraditional student persistence hinders higher education institutions from making

informed decisions regarding policies and practices that would support persistence. By

meeting the needs of nontraditional students, institutions can help them transition into an

environment that supports and assists them in their persistence to degree completion

(Bohl et al., 2017).

Bennett et al. (2021) promoted three ways that institutions may support

nontraditional students such as female active-duty students. These supports included (a)

additional support and resources that address things such as academic assistance, campus

navigation, and self-confidence, (b) inclusive campus culture such as government-granted

clubs/associations or programs for nontraditional students, and (c) quality personnel who

are familiar with the needs of nontraditional students and are passionate about creating supportive relationships with them. O'Toole and Brown (2021) indicated that developed programs such as Veterans Support on Campus (VSOC), a program that employs military-knowledgeable personnel and uses specific software and databases to manage veteran school files, were useful in supporting military students.

Campus Programs and Resources

Lee (2018) suggested that to increase the chances of persistence and overall success in online degree programs, students should undergo a formal orientation event. During this orientation event, it is important that IHE staff connect military students with the available services and resources prior to beginning their coursework and also inform them of the statistics regarding online success rates so that they may be aware and make educated decisions as they navigate their program (Hart et al., 2017).

Kirchner and Pepper (2020) found that military students acclimated to their IHE more easily when mandated to take an introductory course that introduced specific strategies for nontraditional, online learner success. These researchers conducted a study on specific community college support resources and found that 1 community college piloted a program to get veteran students engaged with the campus community while participating in online degree programs. The authors used a program called Canvas to manage their veteran student files using 3 categories: information sharing, community engagement, and professional development. Each category is designed to meet the unique needs of veteran students through an array of methods.

Institutional Personnel Support (Faculty & Staff)

Faculty serve as 1 of the primary points of contact for college students and play a vital role in student persistence (Zerquera et al., 2018). Zerquera et al. examined faculty members' perceptions of nontraditional student experiences to find that faculty participants had common perceptions of 3 aspects of nontraditional students: (a) they understood the complexity of nontraditional students' lives, (b) they were aware of the barriers to academic success among nontraditional students, and (c) they understood the importance of making meaningful connections with nontraditional students. The findings from this study highlighted the need for more research on how the experiences of nontraditional students are perceived and interpreted by those in positions of power at IHEs. (Zerquera et al., 2018). Military students, for example, carry an expectation of frequent, consistent communication and timely responses as a result of their military training (Kirchner & Pepper, 2020).

Gibbs et al. (2019) echoed this in stating that faculty may risk mismanagement of situations when they lack the necessary information and connection to resources to support military-connected students. Faculty carry a heavy responsibility in being able to effectively manage an online environment with nontraditional students including active-duty female learners. As evident in the literature above, proper training informed by research is an essential proponent to designing appropriate instruction that may meet the unique needs of these students.

Summary and Conclusions

Chapter 2 contained a literature review of the academic literature and conceptual framework. This included (a) a literature research strategy, (b) conceptual frameworks, (c) a literature review related to key concepts, and (d) a summary and transition to Chapter 3. Provided within the literature review were scholarly studies that have been conducted on topics and areas that relate to this research study. These topics included studies on military men (or no gender specificity), studies on military veterans, challenges for military-connected students, challenges for female students, institutional support and resources, and online higher education strategies. Minimal research has been conducted specifically on the experiences of female active-duty undergraduate students in online programs and the challenges they face.

Within the historical literature, previous research was provided that supports the extant problem addressed in this research study. A case can be made for further research to address the gap specific to female military students. The insights of this specific population are important to the development of informed higher education initiatives that support nontraditional student persistence, specifically for active-duty women in online undergraduate programs.

Included in Chapter 3 are details on the research method for this study. These details include (a) research design and rationale; (b) role of the researcher; (c) methodology, including participant selection, instrumentation, procedures for recruitment, participation, data collection, and data analysis; (d) trustworthiness; (e) ethical procedures; and (f) a summary and transition to Chapter 4.

Chapter 3: Research Method

The purpose of this qualitative study was to explore the experiences that active-duty women encounter with persistence in online undergraduate degree programs. For this study, a basic qualitative method was used via semistructured interviews to source the information directly from participants who met the criteria of the targeted study population. The collected information will be useful for considering and implementing informed changes to the support offered to active-duty women as they pursue their education and serve their country simultaneously. In this chapter, details are provided on the research methodology. Topics include (a) research design and rationale; (b) role of the researcher; (c) methodology, including participant selection, instrumentation, procedures for recruitment, participation, data collection, and data analysis; (d) trustworthiness; (e) ethical procedures; and (f) a chapter summary.

Research Design and Rationale

The following research question addressed the key concept investigated in this study: What are active-duty women's experiences with persistence in their online undergraduate degree programs? The systematic research tradition used was a basic qualitative study. One-on-one, semistructured interviews were conducted with 13 female online undergraduate students in the U.S. military. Erickson (1986) explained that qualitative study is a useful research method, particularly in education, because gathering a holistic view within a limited context brings thorough detail, enhancing the understanding of both the researcher and the reader.

The basic qualitative research tradition is appropriate when a researcher is interested in studying how individuals interpret their experiences and the meaning they give to those experiences (Merriam & Tisdell, 2016). Using this design, the research question was directly addressed and individual data were gathered. The number of participants was 13 total students. To align with the desired outcomes of this research and gather nontraditional student opinions, the interview method was most appropriate. Interviews offer the best opportunity to probe for participants' opinions, attitudes, and experiences surrounding their challenges to persistence.

Semistructured interviews were conducted with 10 open-ended questions. Included were follow-up questions and probing questions as needed. After collecting participants' responses to the open-ended questions, I coded the data by hand and developed themes to answer the research question. The findings within the data support the purpose of this research: to contribute to the literature and potentially inform higher education administration on ways to develop support and resources. These resources may help mitigate challenges for active-duty women and acknowledge the unique set of challenges this population may face. The interview tool and questions were informed by the conceptual framework and the previous research identified in the literature review to directly address the research question.

Role of the Researcher

The role of the researcher is one of an observer-participant. In qualitative research, the researcher is the data-collecting instrument (Denzin & Lincoln, 2003). In this study, I was tasked with the following processes: (a) present a research topic, (b)

select a method of study, (c) find participants, (d) obtain the consent of participants, (e) conduct the interviews, (f) gather and analyze the collected data, and (g) present the significance of the findings within the data. To fulfill the "human instrument" role, a researcher must exercise transparency with the participants by disclosing information, such as qualifications to be conducting the research, assumptions regarding process or outcomes, and any biases the researcher may have (Greenbank, 2003).

As the researcher for this study, I presented one research question, selected the research methodology and design, and selected a sample of participants. With these components, I conducted semistructured interviews, gathered and analyzed the data to identify key themes, and presented the findings. Lastly, I verified with participants that my recorded interpretations of their experiences and of the overall findings were accurate. Throughout the research process, I followed the prescribed guidelines for practicing ethical and moral research.

I have maintained positions in the higher education field for the past 8 ½ years. While in these positions, I have worked with both students attending on campus and students attending online. In my most recent and current position, I work with students who are either active-duty or veteran military personnel. At no time during this tenure did I have any contact or relationships with the participants of this study. Further, I did not have any relationships or vested interest in their employment within the U.S. military or any other organizations with which they were associated.

For a researcher, there is an important obligation to exercise integrity and to conduct research under prescribed ethical and moral standards to protect the anonymity,

rights, and privacy of the participants and the reputation of the field of education

(Aguinis & Henle, 2004). The ethical principles for protecting human subjects have been

in place at the federal level since 1974 based on National Research Act (Public Law 93–

348) legislation (Hebert et al., 2015). These principles include respect for the participants

as independent, autonomous individuals; justice; and beneficence in minimizing harm

while maximizing benefits through said research (U.S. Department of Health and Human

Services, 1979). The 1974 legislation also created Institutional Review Boards (IRBs),

which regulate research at the institutional level to ensure that these principles are being

met. After receiving Walden IRB approval for this study, as well as partnering

organization approval, I conducted the research following these guidelines to ensure that

the participants and this research received respect, justice, and beneficence. All necessary

detailed information was included in the consent process prior to conducting interviews,

and participants' identities have been masked with alphanumeric coding throughout this

paper. Participants received a $20 Amazon gift card as compensation for their time and

participation.

A final role of a researcher is identifying and mitigating any bias or personal

assumptions regarding the research study. Not doing so may directly affect the data

collection and analysis, ultimately leaving the results skewed and unreliable (Pannucci &

Wilkins, 2010). According to Mehra (2002), there are a few ways to mitigate bias in the

research and analysis process. The first step is having awareness of any personal

assumptions or preconceived notions about the data being collected. A second step is to

take very detailed notes throughout the process in a "subjectivity journal," and to reflect

back regularly to this journal to remain self-aware of one's own thoughts and subjective

perceptions about the findings (Mehra, 2002). Another way to avoid bias is to have

participants review the synthesis of their narrative and the summary of findings to ensure

that all information is correctly interpreted. A final step to address potential researcher

bias is to obtain peer review of conclusive findings to make sure neutrality was

maintained and there is objective representation of the findings. I have exercised all these

steps in my research and reporting process.

Methodology

The methodology for this research was a basic qualitative design in which one-on-

one, semistructured, 45- to 60-minute interviews were conducted via online conferencing.

The interviews were limited to a purposive sample of 13 total students within the

continental United States. Basic qualitative research comprises collecting and analyzing

nonnumerical data (such as audio/video or textual information) to understand

experiences, opinions, or other concepts. This type of research can be used to collect in-

depth insights regarding a specific issue or to produce new opportunities for research

(Agazu et al., 2022). In semistructured interviews, open-ended questions are preplanned

prior to the interview for the purpose of elaboration and clarification, and to obtain the

most in-depth responses possible (Adeoye-Olatunde & Olenik, 2021).

Participant Selection

Participant selection in qualitative research is purposeful (Roulston & Martinez,

2015). Participants who are selected are those who have the most knowledge and

experience with the phenomenon that is being studied. Choices surrounding selection are

based upon the proposed research question, conceptual framework perspectives, and literature review/evidence that informs the study (Sargeant, 2012).

Purposive Target Population

For this particular study, the purposive sampling criteria included (a) female gender, (b) active-duty status in the U.S. military, (c) stationed in the continental United States, and (d) enrolled in an online undergraduate degree program at an accredited institution in the United States. It was determined that each participant met these criteria by requesting verification. This included checking identification cards for current military status and enrollment verification from their current institution of study. In regards to sample size, the sample size is sufficient when there are enough data generated but not *too much* data (> 30 participants is typically too many; Boddy, 2016). The sample size for this study was 13 participants.

After Walden IRB and partner organization approval was acquired, to recruit participants, email invites (Appendix B) were sent to students within my employment institution. Then, letters of invitation to participate (Appendix C) were posted via social media platforms such as Facebook, Instagram, and LinkedIn. Lastly, Walden's participant pool was used for additional sourcing of candidates. The original sample size goal of qualified participants was not able to be met using these means; therefore, current participants were asked for referrals to other individuals who met the criterion and were interested in participating (snowball sampling).

Instrumentation

To conduct this qualitative research, I was the primary instrument for data collection and used a semistructured interview tool that I produced (Appendix A), which was reviewed by three subject matter experts. Semistructured interviews are used most often with qualitative research in the social sciences (Magaldi & Berler, 2020). Although the guide is prescribed, the semistructured format allows for responses to be exchanged in a conversational style. The semistructured interview is considered one of the more effective means of exploring the motivations that drive participants' behaviors and choices and how specific events influence their lives (Raworth et al., 2012).

Establishing Sufficiency of Data Collection Instrument

To establish the sufficiency of this data collection instrument, 10 questions were developed to directly address the research question. This instrument was reviewed by multiple subject matter experts in the field of higher education as well as committee chairpersons for alignment, wording, and sufficiency. The questions were supported by the theoretical framework and previous research outlined in the literature review of this study and were sufficient in studying this phenomenon in depth.

Interview Protocol (Appendix A)

To begin the interview process, a script was used to open the conversation. Using a script at the beginning and end of interviews ensured I did not forget to disclose anything (Hunter, 2012). Then, if no questions or concerns surfaced, the interview questions began, starting with the simpler questions and progressing to more complex questions. All questions were open ended and informed by existing research to promote

rich, qualitative, detailed responses and conversational dialogue. Prompts were used to stimulate responses if a participant had trouble understanding or answering a question. Lastly, the protocol or order of questions was adjusted during the interviews when necessary. Any follow-up questions added during the interviews were included in the conclusive draft of this paper with the justifications for the follow-up questions.

Content Validity

Content validity is a precondition for other forms of validity within research and must be checked during the development process of an instrument. Content validity measures how relevant, representative, and comprehensive a research instrument is in terms of assessing and ultimately carrying out the purpose of a study and answering the research question(s) (Shrotryia & Dhanda, 2019). The questions were screened with three subject-matter experts in the education field to check for researcher bias, leading questions, and clarity.

Procedures for Recruitment, Participation, and Data Collection

In this section, the detailed process of selecting and recruiting participants is provided, along with information regarding the participation timeline and process and the methods of data collection and data analysis plan after completion of the interviews.

Recruitment

Successful recruitment of qualified and willing participants can be challenging for new researchers, especially for qualitative interview-based research due to the required investment of time and interaction between the researcher and participant (Brandt & Zaidman, 2022). Prior to beginning the process, all necessary approvals were sought from

Walden's IRB as well as the IRB (or equivalent) from the partnering institution where I am currently employed. To recruit participants at my institution of employment, the appropriate reports were run using internal databases to secure the email addresses of students who met the parameters of the target participants. Email invitations (Appendix B) were then sent to these students. Because my institution of employment does not have an IRB, approval was secured from the Protection of Human Participants Committee. My institution of employment was the only partnering institution included in this study.

Then, participation invitations (Appendix C) were posted via social media platforms such as Facebook, Instagram, and LinkedIn. The posted invitations included brief details about the research, the required participant parameters, and directions for contacting me with interest (via email or social media messaging). When a participant reached out with interest, their email address was requested, and they were sent the email invitation and consent form. Further, Walden's participant pool was used for additional sourcing of candidates. Lastly, snowball sampling was used as an additional means for sourcing participants when the initial recruitment efforts did not produce a sufficient number of candidates.

According to Begun et al. (2018), there are three steps to participant recruitment: (a) generating contacts, (b) screening, and (c) consent. After I had obtained contact information (email addresses) for participants through the steps listed above, each student received an email to inquire about their participation interest and verify that they met the participation criteria. Attached to the email was the consent form for their review. Participants were given 7–10 days to respond to the email. The directions for response

were included in the email they received. If an individual responded to the email, met the required criteria, and provided their typed consent in their response ("I consent"), their interview was scheduled. Interviews were scheduled via email communication with the participant to find a date and time that worked for both myself and the interviewee. Once a date/time had been agreed upon, the interview was added to a personal calendar and a Zoom link was sent for the agreed-upon time.

Participation

Once 13 students were identified who were interested in participating, met the inclusion criteria, and provided consent, an interview was scheduled. On the interview day, the participant was met at the scheduled time on a Zoom video call. Only audio from the call was used. The interview commenced, during which time the participant responded to interview questions for a duration of 30 minutes to 1 hour. At the end of each interview, a closing script was read (Appendix A) along with a prompt for any questions. In the closing script, I included a note of appreciation for their participation, a brief overview of what would happen next in analyzing the data, and assurance that they would receive a summary of the findings for their review (member checking). Participants were requested to only respond if they felt the findings did not align with their experiences, upon which a follow-up discussion would be scheduled via phone to resolve the issue(s), if any.

Data Collection

The semistructured interviews were held via Zoom, were recorded for transcription and reference purposes, and lasted 30–60 minutes each. Semistructured

interviews were the primary data collection method because they represent the most appropriate strategy for directly answering my research question. Semistructured interviews are personal, intimate exchanges where open-ended questions are used to elicit in-depth, meaningful narratives and storied experiences (Whiting, 2008). One commonly mentioned advantage of semistructured interviews is that the interview has prescribed questions but can be flexible, as the researcher can explore new information that surfaces during the exchange that they may not have considered as relevant to the research question(s) prior to the discussion (Corbetta, 2003; Gray, 2004; Power et al., 2010).

During the interview process, I followed the prewritten interview protocol (Appendix A) to ensure all that participants received the same questions and opportunities for elaboration (Rabionet, 2011). Prior to each interview, all necessary technology equipment was prepared as well as any other recording devices needed during the process. Each interview began with a script introduction and then I requested verbal permission to record the interview, restating the purpose of the study, and the procedure of the interview process. The participants were also reminded of their rights to privacy and to stop or withdraw from the interview at any time.

With semistructured interviews, the questions are not meant to be asked verbatim in the same order with every participant. Rather, the primary questions are used to create conversational flow, and supplementary probing questions are added as warranted to expand on new thoughts or topics that surface (Adeoye-Olatunde & Olenik, 2021). By actively listening to their responses, probing and/or follow-up questions were asked as the conversation progressed. Interviewees were permitted to skip questions that they did

not feel comfortable answering and questions were repeated as necessary. If for any reason an interviewee became uncomfortable or distressed, she was offered a break. If the participant needed to depart or reschedule her interview due to unforeseen issues, she was permitted to do so. This need did not occur during any of the 13 interviews.

All interviews were virtual and were conducted at either my private work office or home office behind closed doors. Participants only needed to be interviewed once and all interviews were conducted over a 9-week period. At the conclusion of each interview, I thanked the interviewee for their willingness to participate and explained any follow-up steps.

Data Analysis Plan

An important step before presenting the findings of a study is to be transparent regarding the data analysis process that outlines a clear connection between data sources, codes, categories, themes, and the analytic choices made to achieve these within the research (Lester et al., 2020). Before formal data analysis could begin, recordings were stored on a personal computer with password encryption and transcribed to a Microsoft Word document.

For this study, I used an inductive analysis approach to analyze the data. Inductive analysis can be used to make meaning of data, develop codes and themes, identify representative data to support the findings, and explain the findings using theories and literature (Bingham & Witkowsky, 2021). Before initiating the coding cycles of this approach, it is important for a researcher to familiarize themself with the raw data. This step is important so that the information is clearly understood, can be read easily,

commented on, and edited for accuracy (Miles et al., 2020). Familiarization can be achieved through transcription of the data, repetitive reading, memo taking, and condensing lengthy selections of text into shorter stanzas (Saldana, 2020).

Following familiarization of the data, the steps for inductive analysis can be completed in 2 cycles. The first step is coding and the second is theme development (Bingham & Witkowsky, 2021). The objective of these cycles is to gradually transform disorganized raw data into conceptual themes that align with the conceptual framework, the purpose of the study, and to answer the research question(s) (Mezmir, 2020).

Coding Cycle

Bingham and Witkowsky (2021) introduced a coding strategy called open coding, which will be used in the first coding cycle to search for repeated words, phrases, and concepts. Saldana (2009) defines a code as a word or short phrase that is "symbolically summative" and captures a datum's main idea and essence. These codes will be hand-coded and outlined in a code overview table within this study. After open coding, any overlapping or redundant codes were reduced into fewer codes through a second coding cycle referred to as pattern coding. These codes were further collapsed into categories as prescribed by Saldana in the organization process, that directly aligned with my research question and became the emergent themes of the data (Silverman, 2015).

During this cycle, a memo writing journal was maintained to write notes regarding labels, coding, key terms, and questions, and to keep track of processes to ensure that each step of the process was explained. Rapley (2011) suggested researchers

keep an eye out for links, patterns, and other associations while they focus on the key labels and the relationships between them.

Theme Development Cycle

In the theme development cycle, I used inductive practice to make meaningful sense of the data by (a) integrating multiple codes to construct themes and findings, (b) identifying the corresponding data that best represents the findings, and (c) reporting the conclusive findings with theory and supporting literature (Bingham & Witkowsky, 2021; Miles, Huberman, & Saldana, 2020). I developed themes by condensing short phrases that conceptualized the findings and directly answered the research question (Bingham & Witkowsky, 2021).

Data Management Software

Data analysis can be further supported by simple management software programs to help store and organize data. For this research, I used a software for qualitative data management that is popular in the education field called Quirkos.

Treatment of Discrepant Cases

A discrepancy in qualitative research is any raw data that falls outside of the expected range of values or is otherwise flagged during the initial review (Lunny et al., 2020). For this study, I conducted a systematic review of the data to surface discrepancies in the coding. This review involves a review of the data by multiple coders in the data analysis to identify any outlying codes that do not align with each other or with the purpose and research question in this study. Multi-coder teams can improve data quality (Church et al., 2019). This process can be carried out by two or more coders, extracting

codes from the raw data and comparing to find any codes that are not in sync or relevant

to the study. Any discrepant information is included in the conclusive summary of this

paper.

<div align="center">**Trustworthiness**</div>

Trustworthiness is the common standard of rigor in qualitative research in which

quality scholarship is derived, from design all the way through dissemination (Johnson et

al., 2020). The topics in this section outline the definitions of each factor of

trustworthiness and how each was established throughout the research process. These

factors include credibility, transferability, dependability, and confirmability.

Credibility

The use of member checking is regarded as one of the higher standards of

ensuring validity within qualitative research (Madill & Sullivan, 2018) and often seems

to be a requirement for rigorous qualitative research (Motulsky, 2021). To establish

credibility, member checking was conducted. Member checking is the process of

soliciting feedback from participants about the findings or interpretations of the collected

data (Lincoln & Guba, 1985). Following the analysis of the data, each participant was

followed up with via email to provide them with the summary of the findings and to

ensure the reporting of the findings was an accurate and a true representation of their

experiences. Participants had three days to complete their review and respond via email if

they found any discrepancies in the information. If a discrepancy was found, the

participant was prompted to request a time to discuss over the phone how to resolve the

discrepancy. After completing this member-checking process, if no revisions were

required, the data analysis was to be considered accurate, concise, and representative of the participants' information and experiences. No discrepancies were brought forth by any of the 13 participants.

Transferability

Transferability is the equivalent of generalizability in quantitative research and is established when readers apply a study's findings to other settings, situations, or populations (Carminati, 2018; Lincoln & Guba, 1985). Lincoln and Guba also noted that it is not the original researcher's task to "provide an index of transferability, but is it his or her responsibility to provide the data base that makes transferability judgements possible on the part of potential appliers" (p. 316). If readers cannot learn from a study's database and apply it to a subsequent set of circumstances, the potential for positive impact from the original study is limited (Stahl & King, 2020).

For the researcher, transferability can only be achieved by providing thick description of the following three components: details including contextual information about the fieldwork site, detailed information about all participants and any partnering organizations, and a thorough outline of all methods and time frames for the data collection process (Stahl & King, 2020). In the findings reported for this study, a thick description of these three components was provided to support the transferability of this research study to future research contexts.

Dependability

Dependability in qualitative studies is often referred to as "consistency" and is defined as work that could be repeated in the same context with similar participants and

methodology, that will yield similar results (Forero et al., 2018). Dependability occurs when another researcher can follow the decision trail used by the original researcher (Thomas & Magilvy, 2011). Some strategies that can be used to establish dependability include peer participation in the data analysis process, thorough and detailed description of the research methodology, and conducting a step-by-step repetition of the study to identify similarities in results or to enhance findings (Thomas & Magilvy, 2011).

Dependability can also be achieved through researcher reflexivity. Reflexivity is a set of ongoing, collaborative, and multi-layered practices where researchers self-consciously critique and evaluate how their subjectivity and context influence their research processes (Olmos-Vega et al., 2023). Lastly, dependability can be strengthened by being able to establish consistency despite any changeability or modularity that may surface during the research process (Janis, 2022).

Dependability was ensured by engaging in peer review, while adhering to a thoroughly descriptive data analysis plan. The peer review was conducted with another Walden University graduate in the same professional field, who has qualitative research experience. This one-time peer review was requested upon completion of the initial review of the data. To achieve this review, the raw collection of data were sent along with a personal analysis to the peer via email. The peer reviewed the data and the analysis to ensure there were no areas of fraudulent data, plagiarism, or biased interpretations. The peer provided their feedback via email and revisions were made as necessary. An audit trail was also constructed via memoing, beginning with the data collection process, though data analysis and reporting. Audit trailing is a tactic that involves keeping an audit

log of all key stages throughout a research project. These key stages include theoretical, methodological, analytical decision making, and documenting how a researcher's thinking evolves with each process (Carcary, 2020).

Confirmability

Confirmability is the degree to which other researchers can confirm or corroborate the results of a research study due to established data that is derived from the true findings and not from the imagination of the researcher (Anney, 2014). Confirmability of this research has been established by exercising reflexivity in the memoing practices to remain aware of any personal influences on the data. Researchers are urged to keep a reflexivity journal to include all events, realizations, and personal reflections during the investigation process (Koch 2006). In this journal, I documented, reflected on, interpreted, and planned each step of this research, analysis, and reporting process. Audit trails by my committee were included throughout the 6 stages of the research process including instrument development, raw data collection, data analysis, development of themes, memoing, and final reporting.

<div align="center">

Ethical Procedures

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After approval from the Walden IRB as well as approval from my institution of employment was granted, the research for this study was completed. Invitations were sent via email to participants along with the consent form. The purpose of the consent form is to inform the prospective participant about the nature of the study, the purpose, the procedure, the risks and benefits, and the timelines. Included in the consent was information on the participant's right to withdraw from participation at any time. By

replying to the email with their consent, participants indicated their acknowledgment of understanding and agreement to participate (Sil & Das, 2017).

If a participant opted to withdraw from the study, this individual was instructed to contact me via phone or email to express their concerns and desire to withdraw. If a participant withdrew from the study, any collected data for this participant would be immediately destroyed or permanently deleted. This participant would also be replaced by a newly recruited participant to ensure there is still a sufficient number of participants and a sufficient amount of data. There were no consequences or negative repercussions for participant withdrawal at any time during the study. A $20 Amazon gift card incentive was offered to prospective participants to draw interest and provide compensation for their time and efforts. All participants received a summary of the research findings after the study was completed.

Ethical storage of research and participant data requires that all information is to be kept confidential in a way that protects particpants' confidentiality (Parry & Mauthner, 2004). To adhere to the required and obligatory ethical procedures regarding participant data collection and storage, institution names and participant names were masked by using alphanumeric codes within the analysis and reporting process. All participant information as well as all research documents, recordings, and researcher journals are, and will remain, locked away in a secure environment for 5 years beyond the completion of this study. This secure environment is in my personal home office space where I have lone key access to the files. After 5 years have passed, all documents, paper and digital, will be destroyed or erased.

Summary

Chapter 3 of this paper covered the research methods of the completed research study. This included (a) research design, (b) the role of the researcher, (c) methodology, (d) trustworthiness, and (e) ethical procedures. Within these topics, I discussed the details of my implemented research, the importance of ethical research practices, the specific details regarding how the data were collected, methods on how the data were organized and interpreted, and how the data were reported while mitigating bias to establish the 4 areas of trustworthiness.

In Chapter 4, the results of the study are provided including (a) study setting, (b) data collection, (c) data analysis, (d) results, and (e) evidence of trustworthiness.

Chapter 4: Results

The purpose of this qualitative study was to explore the experiences of active-duty women with persistence in online undergraduate degree programs. A basic qualitative method was used via semistructured interviews to source this information directly from participants who met the criteria of the targeted population. The participants directly answered the research question of this study, which was the following: What are active-duty women's experiences of persistence in their online undergraduate degree programs? In this chapter, details are provided on the results of the conducted research study. These topics include (a) the study setting, (b) data collection, (c) data analysis, (d) results, (e) evidence of trustworthiness, and (f) a chapter summary.

Setting

Participants were recruited from a partnering institution; through social media platforms such as Facebook, Instagram, and LinkedIn; through Walden's participant pool; and lastly, through the technique of snowball sampling. These participants were female active-duty service members who were enrolled in online higher education programs during the time of data collection. The participants were nontraditional students in an online setting who attended coursework through virtual means versus in-person classroom attendance. The interviewees attended during atypical, off-work hours, at their convenience. Interviewees were either at home, in their vehicles, or at their place of employment during the time of data collection. No participant reported any significant personal issues that may have affected their interview or information provided during the data collection process.

Demographics

The study sample consisted of 13 participants who were female in gender and between the ages of 24 and 42. As conditions of eligibility to participate in this research study, each participant was female, serving in a branch of the U.S. armed forces, and enrolled in an online degree program in the United States. Of the 13 participants, nine were mothers, eight were married, four were married to other military service members, and the time of service range was between six years and 24 years. Of these participants, all 13 were enrolled in bachelor's-level degree programs. Detailed demographic information for the same is presented in Tables 1 and 2.

Table 1

Female Service Members, Enrolled in Online Undergraduate Degree Programs

Participant	Gender	Age	Branch of service	Time of service	Level of education program
SM1	Female	27	Army	8 years, 1 month	Bachelor's
SM2	Female	25	Army	6 years, 3 months	Bachelor's
SM3	Female	29	Marine Corps	9 years, 2 months	Bachelor's
SM4	Female	30	Army	10 years, 2 months	Bachelor's
SM5	Female	24	Navy	5 years, 1 month	Bachelor's
SM6	Female	32	Marine Corps	13 years, 7 months	Bachelor's
SM7	Female	37	Navy	8 years, 11 months	Bachelor's
SM8	Female	28	Navy	7 years, 4 months	Bachelor's
SM9	Female	42	Army	23 years, 8 months	Bachelor's
SM10	Female	33	Marine Corps	12 years, 0 months	Bachelor's
SM11	Female	28	Navy	9 years, 8 months	Bachelor's
SM12	Female	26	Navy	6 years, 10 months	Bachelor's
SM13	Female	27	Army	6 years, 6 months	Bachelor's

Table 2

Parents/Spouses

Participant	Marital status	Service member spouse	Parental status
SM1	Single	N/A	Parent
SM2	Single	N/A	Nonparent
SM3	Single	N/A	Nonparent
SM4	Married	Non-service member	Parent
SM5	Single	N/A	Parent
SM6	Married	Non-service member	Parent
SM7	Married	Non-service member	Parent
SM8	Married	Service member	Parent
SM9	Married	Service member	Parent
SM10	Single	N/A	Parent
SM11	Married	Service member	Parent
SM12	Married	Non-service member	Nonparent
SM13	Married	Non-service member	Nonparent

Data Collection

Before data collection began, proper approvals were retrieved from the Walden University IRB (IRB #04-26-23-0678870) and the protection of human subjects committee at the partnering institution used in this study. Once approvals were in place, reports were run using an internal database at my institution of employment to generate a list of prospective participants using the appropriate search parameters. These parameters included (a) female gender, (b) active duty in the U.S. military, and (c) actively enrolled in an online undergraduate degree program. The generated report consisted of 38,836 prospective students. Email invitations were then sent with a consent form attached to approximately 150–200 students from the report per day. The purpose of this number was

to stay under the threshold of sending "spam" emails and to control the number of responses received in return. From each batch of emails sent, between 10 and 20 error emails were returned due to addresses that were no longer valid. This reduced the number of prospective participants by approximately 8.6%, leaving the prospect list closer to 35,496 students. All 35,496 students were not emailed as the target sample size was met before completing the list. In total, approximately 6,750 were sent to students from the institutional report.

Simultaneously, in the 1st week of recruitment, invitations to participate were posted on three social media platforms: Facebook, Instagram, and LinkedIn. These invitations briefly described the research study, the required parameters for participation, and contact information for interested participants to reach out directly via email. These posts remained on my social media accounts until the data collection process was complete. The posts were shared in daily "stories" sporadically to draw new interest as needed. Friends and family members were "tagged" to extend the reach of the social media posts and solicit support from those in my network. Seventeen total consent emails were received over the duration of 9 weeks, and four of the interested parties either became unresponsive or did not show up for their scheduled interviews. All four parties were followed up with to no avail. Therefore, a total of 13 participants were successfully interviewed during the 9-week collection process.

During the 1st week, four candidates were received that met all criteria and were interested in participating. Three of the candidates were interviewed in the 1st week, and one was interviewed in the 2nd week. During the 2nd week, additional emails were sent

to prospective students from the institutional report, and two additional interested candidates responded as a result. One of those candidates was scheduled to interview twice but failed to attend both meeting times. The second of the two was interviewed during the 3rd week. In Week 3, an additional 150 students were emailed per day from the institutional report. No interested parties responded this week. In Week 4, the daily institutional emails continued to be sent. One participant was interviewed during this week. From the Walden participant pool, three emails were received from prospective participants who claimed to be qualified and interested. These individuals turned out to be fraudulent and did not interview.

Since originally planning for a 4- to 6-week data collection period, other means of recruitment were exercised, which included snowball sampling from previous participants. Five participants who had already interviewed were contacted again, asking for referrals to other students they might know who met the criteria. In Week 5, three more candidates were received via snowball sampling from previous participants. These additional candidates were interviewed during Weeks 5 and 6, bringing the interview total to nine participants by the end of Week 6. In Week 7, social media platforms were used once again for additional reach-out. During this reach-out, two more candidates were sourced from individuals within my social media networks. These new candidates were provided with my contact information and reached out via social media messaging. They were provided with the email invitation and consent form, and both were interviewed during Week 7.

In the final 2 weeks of the data collection process, the daily email blasts continued to students on the institutional report. At the same time, four colleagues were contacted from my personal and professional network to request their assistance with sourcing the final participants needed to complete the data collection process. While I was working with these colleagues, two additional interested participants surfaced from the institutional email list, and one final participant was identified through networking means. The final two participants were interviewed in week nine. The data collection process required 9 weeks, and the original planned time for this process was 4 to 6 weeks.

There were no unusual circumstances encountered during the data collection process aside from the fraudulent prospects from the Walden participant pool. All interviews took place between May 1, 2023 and July 1, 2023, and ranged from 30–60 minutes in length. An interview protocol was used with each participant to ensure that all interviews were consistent and provided participants with the same questions and opportunities to provide as much information as possible. Interviews were recorded and transcribed using Cockatoo AI transcription software after the completion of all 13 meetings. Table 3 lists the meeting time lengths for each of the interviews.

Table 3

Duration of Participant Interviews

Participant	Duration of Interview
SM1	44 minutes
SM2	34 minutes
SM3	42 minutes
SM4	44 minutes
SM5	42 minutes
SM6	35 minutes
SM7	40 minutes
SM8	42 minutes
SM9	56 minutes
SM10	37 minutes
SM11	46 minutes
SM12	39 minutes
SM13	31 minutes

Data Analysis

An inductive analysis approach was used for this study where the collected data guided my data analysis process, which allowed me to identify any codes, patterns, themes, and concepts. The purpose of an inductive approach is to condense raw textual data into a summary of conceptual findings and to establish a connection between these conceptual findings and the research objective (Thomas, 2006). When transcribing the audio interviews into text, I was able to gain an initial, overall understanding of the

collected information. During this transcription, potential themes were noted in the margins of the document. The interviews were transcribed verbatim, and all participants were assigned an alphanumeric code, for example, SM1 = Service Member/Interview 1, SM2 = Service Member/Interview 2,and so forth.

During the initial coding phase, all of the transcribed data were imported into Quirkos qualitative analysis software by "node" or interview question. This allowed the software system to surface codes based on the responses to each question so that the codes could be organized and later condensed into categories. Table 4, reflects the codes generated during the initial coding phase using Quirkos.

During the coding process, the surfacing codes were continuously compared to the keywords and concepts listed throughout the literature review and conceptual frameworks. This helped to develop categories based on the experiences of these 13 service members and their reported challenges with higher education persistence. After this cross-comparison, a second cycle of coding was conducted from the initial codes, to condense the list into distinct categories based on definition and relevance to the research question. These categories would eventually translate to the final themes to be summarized in the findings of this research paper.

Table 4

Quirkos Nodes/Codes and Transcript Evidence

Interview question	Transcript evidence
1. Military students are classified as nontraditional students. Nontraditional students are those who are adult learners, have full-time jobs, families, and do not attend college as a traditional on-campus student would. What have been your experiences and challenges as a nontraditional college student?	• Able to complete courses at my own pace • Have had a positive experience • Time management is important • Access to instructor makes a difference • Instructor flexibility • Online courses are flexible • Technology challenges
2. Can you describe your experiences and challenges with attending your courses in an online setting?	• Meets the needs of military students better • Technology issues are a challenge • More reading and videos than instructor lecture • Less interaction with class and instructor • Instructor is not accommodating
3. Persistence is defined as the ability of a student to attend and complete courses in their program from term to term without interruption. What challenges have you experienced in persisting from term to term in your program?	• Operational commitments and deployments in the military are challenges to persistence • Family obligations take priority over education • Work hours are demanding • Moving duties stations causes disruptions to persistence • Lack of confidence/motivation
4. Tell me about your experiences and challenges being a *female,* active-duty service member?	• High men-to-women ratios in the military • Women are expected to be motherly and perform well • Lack of support from male counterparts • Motherhood/child-care issues/concerns • Work harder to be promoted to leadership positions • Regular feelings of inferiority • Sexual harassment
5. Tell me about the military occupation specialties (MOSs) you have held in your time of service including your current MOS. How have the demands of your MOS(s) impacted your	• Long or atypical hours • Deployments, special assignments, and movements cause class drops • Specialty requires round-the-clock availability • Heavy, stressful workloads

Interview question	Transcript evidence
6. ability to persist term-to-term in your online program?	
7. Please describe your current household structure. Can you explain your experiences with how family obligations and/or motherhood have presented challenges toward your educational persistence?	• Young children requiring childcare • School-age children with extracurricular commitments • Spouse in the military • Spouse with demanding job • Child with special needs • Family needs come before education
8. What experiences do you have related to military-specific obligations such as special assignments/duties, deployments, or permanent changes of station (PCS) and how have these specific experiences affected your ability to persist in your online degree program?	• One or more deployments • Special assignments/additional duties • Change of duty station causes inconsistency • Inconsistency in work hours/schedule
9. What challenges have you experienced related to physical injury or mental illness (such as depression, anxiety, or PTSD) as a result of your military service? How have these injuries or illnesses challenged your ability to persist in your program?	• Work-related PTSD • Depression • Anxiety • Mental illness that causes frustration and focus issues • Physical injuries • Disabilities that make school challenging
10. What institutional student support offerings, programs, or resources have you been offered in your experience as a nontraditional student and how have any support offerings, programs, or resources been supportive (or not supportive) of your persistence?	• Access to military student support groups • Military knowledgeable personnel • Academic advisor who supports persistence • Disability office for additional support in classes • Counseling/mentor services • Supportive instructors
11. Can you please provide any other information that was not covered in the questions above, that you would like to add regarding the challenges you have experienced with persisting in college and being an active-duty woman?	• Trying to succeed in military and go to school at the same time is a challenge • School flexibility is a must • Military students are different and need specialized resources

Data collected through the interview research questions were asked to gain an understanding of the experiences of female active-duty service members and their challenges with persistence in online undergraduate degree programs. The data were transcribed for clarity and coding purposes. Two coding cycles were conducted to narrow commonalities among the participants and reduce these commonalities into final themes as they relate to female service member challenges with persisting in their degree programs. Table 5 outlines the themes and theme statements derived from the coding and data analysis process.

Table 5

Themes and Theme Statements

Theme	Theme statement
Online learning format	Participants expressed positive and negative aspects surrounding the online learning format and how these aspects may present challenges to their persistence.
Gender difference in military	Participants expressed a difference in being female in the military and how being female presents unique challenges to finding professional success and persisting in education programs.
Mental, physical, and emotional health	Participants expressed a number of physical, mental, and emotional health issues as a result of military service that present challenges to persisting in online under graduate degree programs.
Military occupation demands	Participants expressed that the demands of their military occupations create heavy workloads, unexpected assignments, long hours/workdays, and additional duties such as volunteer work. These demands create challenges to persisting in online undergraduate degree programs.
Deployments and movement	Participants expressed that military deployments and frequent relocation due to change of duty station or special assignment has presented challenges to persisting in online undergraduate degree programs.
Family obligations	Participants expressed challenges regarding family obligations with some being single parents and others having spouses who are also in the military. Maintaining schedules and familial obligations has created challenges to persisting in online undergraduate degree programs.
More need for Support/Resources	Participants expressed a need for additional military-specific support resources such as childcare, military-knowledgeable Advisors, or support groups of military students within their institution.

After condensing codes into these final themes, relationships were compared

between the themes to the concepts within the conceptual framework. Table 6 shows the

themes and how each compared to the components within the two conceptual frameworks

that guided this study.

Table 6

Themes and Conceptual Framework Components

Theme	Institutional adaptation	Institutional support outside of classroom	Population requires differentiated experience	Availability of institutional resources	Coursework support and instruction
Online learning format	X	X	X		X
Gender difference in military	X	X	X		
Mental, physical, and emotional health	X	X	X	X	X
Military occupation demands	X		X		X
Deployments and movement	X		X		X
Family obligations	X	X	X	X	X
More need for support/resources	X	X	X	X	X

Based on the summarized responses of the participants and the conceptual

framework, there is an evident intersection of ideas. Each theme represents specific

elements presented in the conceptual framework and is outlined in the results section that

follows. The themes that emerged during the data analysis process presented the areas of

challenge for active-duty women as they pursued online undergraduate degrees and the

challenges for institutions to recognize and address these unique challenges. No discrepant cases were revealed during this study.

Results

The results presented here are based on the research question: What are active-duty women's experiences of persistence in their online undergraduate degree programs? The final seven themes that emerged from the collected data will be discussed in this section.

Theme 1: Perceptions About the Online Learning Format

Thirteen active-duty women were asked questions about their experiences with persistence in their online undergraduate degree programs. The majority (12 out of 13) of participants reported having had mostly positive experiences while attending higher education courses online. Only one participant expressed fully negative experiences with the online learning format.

Positive experiences

Eleven out of 12 interview participants reported having had positive experiences with attending their higher education programs online. SM1 reported that, "Online courses fit the needs of military students better." SM12 stated, "Online classes are easy and flexible." SMs 2-4, 6, 8-11, and 13 also used the term "flexible" to describe their experiences with taking courses online. In terms of experience, SM4 explained, "Time management is probably the most important factor in being able to take courses online."

Instructors were another component mentioned frequently by participants. Eight out of 13 participants discussed in some capacity that instructors being available and

accommodating made a significant difference in their experiences. SM2 stated, "When you have a teacher that gives you extensions on your assignments and works around your military schedule, it makes it easier to be successful in the class and not have to drop." SM3 agreed that, "Having supportive professors that understand that military students have different needs and demands that civilian students don't and accommodate these differences, that's really going to be what helps me finish this program."

Negative experiences

Only one participant reported that her experiences with online higher education were fully negative and created increased challenges to persist. SM7 explained, "Military life is dumbed-down and I expect school to be the same. There is no one-on-one time with the instructor and there is no hearing the real-time input or opinions of your classmates. I am not good at putting thoughts into words so the online format is harder for me." SM3 stated, "One challenge for me has been internet access and technology problems. Sometimes you're somewhere where you don't have Wi-Fi or just your computer isn't working and that makes it harder to complete the assignments." Eight out of 13 participants also mentioned issues with technology as a challenge in online degree programs. SM2, SM4, SM7, SM10, SM11, and SM12 provided statements similar to SM13 in that, "The only thing I don't like is not having the teacher there in front of you at all times so you can ask questions when you need to." Three of the 13 interviewees also reported a dislike for having to learn from videos and PowerPoints versus a lecturer. SM6 added the importance of communication in the online setting: "With online classes, it's difficult because you're communicating pretty much only virtually. Which can lead to

many miscommunication problems if what is being taught isn't clear. I'm one of those students who needs a lot of structure and really thorough instructions."

Theme 2: Gender Difference in the Military

During the interviews, participants were asked about their experiences being a *female* active-duty service member. Eleven interviewees agreed that there was an experiential difference in being a female service member. Two interviewees, SM4 and SM12, did not report challenges with being female. SM4 stated, "I have not had any problems with men in the military. All of the male, Senior NCOs that I have reported to were all in support of me continuing my education." SM12 also commented, "I'm in a squadron now where I feel like everyone's contributions are appreciated and equal and women are treated fairly, which I know is not the case in a lot of the military across the branches."

Among those who reported challenges with being female in the military, SM6 and SM10 reported having experienced some type of sexual harassment at some point during their time in service. Four SMs discussed the feeling of needing to be more reserved and/or sensitive than their male counterparts. SM11 stated, "People expect women to be quieter and more sensitive. If you're not, you're considered 'difficult to work with.'" SM3 claimed, "My specific job is a predominantly male MOS. So, you have to kind of act tougher to make sure that you fit in and to make sure that you are getting the same opportunities as your male counterparts and you're performing as well as they are so that when it comes to promotion, you're not being overlooked just because you're a female." SM1, SM2, SM7, and SM8 also made points about having to work harder than male

counterparts to reach career goals and promotions. SM8 stated, "The military is notorious for glass ceilings, probably on account of the history of the military just being male-dominated. Almost everything about it is masculine and designed by men. So, it's hard as a woman, to leave a female footprint that is significant and respected."

Several participants also discussed the balance of motherhood with being a female active-duty service member. SM9 talked about feelings of obligation. She stated, "Being female, having kids and a family, makes you the odd woman out. You feel more awkward than males and still feel responsible for your home obligations." SM11 agreed, "You're still expected to perform motherly roles and be nurturing from a societal point of view, but at the same time you have to have a fulfilling military career. SM7 added, "When you are in uniform you are supposed to forget that you have a family and a life outside of the military. Men don't have to worry about that, assuming they have a spouse at home taking care of these things, where women have to do it all. It's almost as though men have women both as support and encouragement to do everything they want to do to better themselves. Where it's not always reciprocated the same way for women."

Theme two aligns with the conceptual framework ideas that female active-duty students have a different experience than their male counterparts and other nontraditional students. This theme further supports that institutions must adapt their environment to recognize these differences and develop resources that directly assist this type of student with their unique challenges so that they may find success in higher education persistence. This includes support both inside and outside of the classroom.

Theme 3: Mental, Physical, and Emotional Health Challenges

Of the 13 women interviewed, 11 claimed to have had some type of mental, physical, or emotional health challenge that proved to be a hindrance to persisting in their online degree programs. Two SMs either had no issues to report or did not feel their injuries affected their ability to persist. Of the medical issues reported, the following were disclosed: PTSD, anxiety, back pain, neck pain, joint pain, sciatica, ADD, ADHD, depression, broken bones, elevated stress levels, COVID-19, tethered spinal cord, surgeries, social anxiety disorder, and hearing loss, vision impairment, and muscle injuries. Table 7 shows the generalized injuries reported by each service member.

Table 7

Injuries Reported by Each Service Member

Service member	PTSD	Anxiety/ social anxiety disorder	Local joint/ muscle pain/ injury	ADD/ ADHD	Depression	Broken bones	Hearing loss	Vision impairment
SM1	X				X			
SM2		X			X			
SM3		X				X		
SM4		X			X			
SM5		X	X			X		
SM6			X		X			X
SM7		X	X					
SM8	X	X			X			
SM9			X		X	X		
SM10								
SM11			X	X				
SM12			X				X	
SM13	X	X					X	

Theme 3 relates heavily to the conceptual frameworks presented in this study including the need for institutions to provide specialized environments and support

active-duty women both on and offsite. The collected data provides evidence that this population requires a differentiated experience. More specifically, female active-duty service members could benefit from added support resources or tailored instructional flexibility that works with their disabilities. The unique needs of active-duty women as a result of military service creates a unique situation where, in order for them to find success in their online degree programs, their lifestyle and experiences must be understood by higher education administrators. This is important so that appropriate support systems can be developed within the online higher education realm.

Theme 4: Military Occupation Demands

Of the 13 interviewed participants, all 13 reported ways in which their military occupation contributed to their challenges to persisting in online undergraduate degree programs. This included factors such as long, atypical hours/workdays, special assignments, required volunteer service, demanding workloads, frequent travel, physically intensive job duties, and "on-call" status. Five of the SMs described their experience being Navy personnel. SM11 elaborated, "In order to get promoted, the Navy always asks you to take on additional volunteer work. So, you're working 12-13-hour days between your normal job and the volunteer duty. At the end of your workday, you have no desire to go to school." SM10 added, "As a Recruiter, you're working 12-hour days and a lot of weekends. You don't even get to have dinner with your kid because you have to stay at the office until 7 or 8 at night after coming in at 7:00am to PT with your recruits."

SM5 provided how being in an officer/leadership positions in the military increases your demands and challenges persistence even further. She stated, "As an Officer, I can only go to school as I can go. As a leader, I can't say 'no' in my position and being operational, the job calls you to duty with very little notice. I definitely can't commit to any classes or programs that are not 100% self-paced." SM13 also discussed leadership challenges: "As a Sergeant, I have to worry about my soldiers first, my job, my family, and then school. I am one of the few females that holds this MOS as it is typically held by males. So, I have a lot of heavy lifting and people counting on me to be good at my job."

SM13 also discussed how the specific details of her position restricted her abilities to pursue school and work simultaneously. SM13 continued, "We are always moving; We start early in the morning and finish late at night. Service is not always reliable. We can't have technology around ammunition due to the risk so I can't even have my phone or laptop or hotspot around my work equipment." SM7 discussed how being in the medical field in the Navy is a high-demand specialty and makes school persistence extremely challenging. She stated, "Being a corpsman makes it really hard because as a corpsman, you're the medical resource for the Marine Corps. We're always being pulled for things with the Navy and the Corps, while also having patients in-house. Everyone needs medical all the time. So, we are always being pulled in different directions and any given time."

SM1 and SM10 both mentioned ways in which military occupations are different than civilian jobs. SM1 echoed SM5 in stating, "You don't get to say 'no' in the military.

In a civilian job, you can leave if you want and find something else to do. That's not an option in the military." SM10 also stated, "I think the hardest part is not having a say in my work schedule. I can't schedule things for myself outside of work; things like appointments or taking classes, because I never know what kind of hours I am going to have to put in and when those hours will change. I don't have the consistency of most civilian jobs."

Of all parties interviewed, they provided evidence of how military occupations differ from civilian work and how these differences directly impact their ability to pursue and persist in higher education programs. This theme aligns with many concepts provided in the literature review and conceptual framework surrounding how female active-duty service members sustain inconsistent, demanding work positions that are atypical and require IHE administrators to provide unique, research-based support to assist this student population towards success.

Theme 5: Deployments and Movement

Regarding deployments and movement such as changes of station or special duty assignments, 10 out of 13 interviewees discussed how military movement has affected their persistence in online degree programs. Seven out of 13 participants (SM2, SM3, SM4, SM5, SM9, SM12, and SM13) reported having been deployed at least once during their service. Four participants (SM5, SM8, SM9, and SM11) reported having received a special duty assignment overseas at least once during their time of service. All 13 participants reported having changed duty stations (PCS) at least once during their service.

When having conversed about deployments, SM2 said, "Deployments make going to school non-existent." SM12 echoed this in stating, "You think you'll have a lot of downtime on deployment but you don't so you end up having to quit your classes." SM13 added a similar sentiment, "They told me I was going to have a bunch of time to work on schoolwork when I got to Iraq and it was just super hectic. There was a lot of incidents where we were still getting hit. So, we were working 12-hour shifts. I was working six days a week., So I only had really one day off and then during the week when I did have those 12 hours off I was just exhausted," When deployments and movement were discussed with SM11, she summed up her experience in stating, "There is so much that goes into moving. If you are trying to aim high for good grades in school, it's not a good place to be. You are not able to give classes more than the bare minimum, if that. If you want to go to graduate school, it kind of leads you to shoot yourself in the foot when you don't have the time to commit to performing well. With moving, there's a lot of limitation on where you can go and what you can do with school. If you want to do specific programs, you have to consider how long you are going to be in a certain place and if the military lifestyle will allow you to pursue that specific path."

SM5 discussed the challenges of frequent location changes: "It is very difficult to partake in school when moving constantly. Especially when you have kids and a family. Being single with no kids was easier but with this specific "operational" billet and now having a family, school is much more difficult to stay in." All participants expressed movement in the military as a challenge to persisting in degree programs. This theme aligns with many previously researched experiences regarding general military personnel

and their ability to persist in school while on active-duty. This theme most supports the concept that this student population requires institutional support, especially from instructors and class flexibility.

Theme 6: Family Obligations

Eight of the 13 female service members interviewed reported being married. Nine of the service members reported having children. Of the eight married service members, four of them were married to spouses who were also serving in the military. Of the nine who have children, three were single parents. With these characteristics comes unique experiences that further promote challenges faced by the participants regarding their ability to persist in their online degree programs.

SM5 was a single mother of two children who described, "I have had to delay school and have taken many breaks due to inconsistencies and the needs of my family. I have to be a mom-taxi for my two kids and have to have detailed plans and knowing what my commitments are for my job plus being able to schedule family-life around it." SM10 who was also a single parent, parallels this in providing, "Being a single mom in the military makes everything that much harder. I don't have a partner to pick up the slack and give me breaks. I have to be the one to cover everything for my kid and sometimes it's scary." All three single mothers described similar experiences in which being a single military mom leaves little room to prioritize educational persistence.

The four service members who were married to military spouses also reported added challenges. SM8 reported, "My husband and I both have very demanding jobs in the military. We are both deployable and can be called to leave at any time. When I

deploy, he is responsible for taking care of the kids and the house while I am gone and vice-a-versa." SM9 who also has a military spouse and two children added, "I was supposed to go to a specific Navy school back in 2012 to become the military equivalent of a PA. So, I had to drop my classes at the time because you can't be in college while enrolled in this school. Well, then I got pregnant which delayed my education even more. So, trying to navigate a new marriage with an infant put school lower and lower on my priority list." Finally, SM11, who was a parent and married to a service member, posed the questions: "Do you want to spend your little bit of free time around work with your family or do you want to be doing your online classes? Where does education fall in the priority line when you have to make sure you take care of yourself and your family first? It doesn't sometimes."

While civilian student populations often have similar home-life situations such as marriage, children, single parenthood, and military spouses, active-duty women must juggle these responsibilities while serving in military roles simultaneously. Serving on active duty creates special circumstances that are not always addressed by the resources provided in IHEs in the united states.

Theme 7: More Need for Support/Resources

Of all of the interviewed participants, there were 10 participants who noted specific resources that they might find helpful from their institutions while striving for persistence. These specific resources included having female advisors. SM9 claimed, "I feel having a woman advisor was beneficial because they are empathetic to women and stayed on top of supporting me." Another specific resource mentioned by multiple

participants was childcare resources. This could mean funded programs that assist with childcare, local onsite childcare services, or in-home sitting services that could assist mothers as they participated in their online coursework.

Military-specific offices within IHEs was another support resource mentioned. SM11 discussed the importance of having a specific person or group of military-familiar staff that can assist with military financial benefits, military scholarships, academic advisement, and disability assistance. SM3 and SM7 and SM10 also mentioned the benefit of having military-knowledgeable IHE staff. While some IHEs have military offices, some may not offer the necessary array of resources or may not be staffed by appropriate personnel who can effectively assist this specific population of military students. Some IHEs do not have a military office at all.

A final support resource included by the participants of these interviews was connections to other active-duty students. Five participants agreed that having a network of other military men and women within their institution would help them persist and feel more comfortable in their educational pursuits. SM7 stated, "Having a connection to other military students at my school would be super helpful. It would be like a peer support program where we could take classes together and build comradery. It would also be nice to have classmates that might have the same struggles as me to connect with." SM2 also agreed that having access to other military students could be beneficial: "I know a couple other military women who are taking classes online and we talk about having the same types of issues. They don't go to the same school as me but they have similar stories and challenges." SM12 offered an idea for an institutional application

where students in the same program or classes could connect to discuss assignments, content, and communicate in real time.

SM4 discussed having military support services at her IHE, however, she stated, "When you mention military service at my school, they throw countless resources at you. But many of them don't apply to me. A lot of them are not specific to military women, or are generic like counseling services, or alumni relations; Things I don't really need." Within this final theme, there are some evidence-based recommendations for desired services that could be helpful in providing IHEs with the knowledge regarding what active-duty women experience. Also recommended were some institutional support services that may be necessary to help this student population with their persistence challenges and needs. Only three participants did not provide any experiential insight or recommendations surrounding institutional support and resources.

Summarizing Answer to Research Question

Thirteen active-duty women were asked questions about their experiences with persistence in their online undergraduate degree programs. In analyzing the data from these interviews, the seven themes that emerged focus on specific areas of life in which active-duty women reported challenges to their ability to persist in online higher education programs. During the interviews, all 13 women had multiple challenges to report as well as recommendations for how institutions of higher education could better support their unique challenges and efforts towards persistence.

The themes that were developed from the highest amount of participant feedback were mental, physical, and emotional health challenges, deployments and movement, and

family obligations. The participants had many challenges to report in these areas as a result of their military service; Challenges which specific hindered their ability to persist in their degree programs. The data revealed that many of the participants felt their experiences with persistence differed from the experiences of nonmilitary college students and that their challenges required differentiated support.

Several participants mentioned ways in which institutional support made a difference and provided examples and recommendations of how IHE administrators could tailor their institutional support resources to best serve the needs of active-duty women. A few of the interviewees also mentioned the importance of being able to persist and complete their online degree programs in order to advance their careers, set a positive example for their families, and for personal achievement or satisfaction. This mentioned importance aligns with the literature and framework of this study in that students have different motivators for completing a degree program but nontraditional students, such as active-duty women, have unique challenges that must be understood and acknowledged by IHEs in order to develop resources that support their persistence and overall success.

Evidence of Trustworthiness

Credibility, transferability, dependability, and confirmability are the four pillars of trustworthiness in qualitative studies. Credibility is a measure of the truth value and how correct and accurate the findings of the study are (Motulsky, 2021). To achieve credibility in this research study, the member checking technique was used. Member checking consists of returning the results of the transcribed data to participants to check for resonance with their experiences and accuracy of the reported information. After

transcribing the interview data, every participant was sent a copy of the transcription for their member-checking purposes. They were given 3 days to review the document and provide feedback if any information was inaccurate, unclear, or did not align with their experiences. None of the 13 participants reported any discrepancies or misinformation in the data, therefore, no changes were made.

To maintain transferability, readers must be able to apply a study's findings to other settings, situations, or populations (Carminati, 2018; Lincoln & Guba, 1985). Transferability was established by thoroughly outlining the setting, research design, and data analysis plan. By taking thorough notes and providing thick, step-by-step details of how this research was conducted, readers should be able to replicate this research design and effectively apply it to subsequent sets of circumstances.

Dependability is characterized by the consistency of a research study and occurs when another researcher can repeat the study using similar participants and methodology, yielding similar results (Forero et al., 2018). Dependability was established by conducting a peer-review with another Walden University graduate in the same professional field, who has successfully completed a qualitative study. Following my initial review of the data, the raw collection of data was sent with my personal analysis to this peer via email. She reviewed the data and my analysis to ensure there were no areas of fraudulent data, plagiarism, or biased interpretations. She provided me her detailed feedback and revisions were incorporated before conducting the final data analysis. The final data analysis was also sent to all 13 participants during member checking to ensure clarity, resonance, and accuracy. Lastly, an audit trail was kept via memoing, beginning

with data collection process, though data analysis and reporting. Audit trailing is a tactic that involves keeping an audit log of all key stages throughout a research project including my thought evolution and the decision-making processes.

  Confirmability was established by exercising reflexivity during my memoing processes to remain aware of my own influences on the data. This reflexivity journal included documentation of planning and interpreted as much as possible during this research, analysis, and reporting process. Audit trails of feedback from my Walden committee throughout each stage of the research process were included such as instrument development, raw data collection, data analysis, development of themes, memoing, and final reporting. In the final report, the data analysis included themes with associated theme statements using direct quotes from the 13 interviewees. As a researcher, the focus was on maintaining neutrality to support overall confirmability.

Summary

  The purpose of this study was to investigate the experiences of active-duty women in the U.S. military and their challenges with persisting in online higher education programs. In response to this, the participants provided feedback that was analyzed and resulted in seven themes. The participants directly reported experiences and challenges they faced toward persistence in their online undergraduate degree programs. Each provided unique sets of circumstances congruent to their active-duty service in the military and how these circumstances create barriers to persisting and completing their desired educational goals. This included challenges with learning in an online format, gender differences/inequalities in the military, mental/physical/emotional health issues,

military occupation demands, deployments and movement, family obligations, and the need for increased institutional support resources. The participants conclusively felt that military women experience unique challenges that hinder their persistence and require informed, tailored resources from their institutions to support their efforts towards persistence.

Chapter 5 includes a discussion of the findings and the implications of this research study. Also provided in Chapter 5 are the limitations of the study and recommendations for future research opportunities. Chapter 5 concludes with the potential impacts for positive social change that may result from this completed research study.

Chapter 5: Discussion, Conclusions, and Recommendations

In previous research, studies have found that nontraditional student populations such as military students experience unique challenges to education persistence as a result of their military service (Borsari et al.; 2017, Camacho et al., 2021; Chiara et al., 2020; Deshpande, 2021; Gibbs et al., 2019; Vacchi et al., 2017). The research problem addressed in this study was that the challenges surrounding persistence in online undergraduate degree programs among active-duty women in the United States are either unknown or unacknowledged in the support programs provided at IHEs. The purpose of this qualitative study was to explore the experiences of active-duty women with persistence in online undergraduate degree programs.

The literature review on this topic presented a gap in research surrounding the experiences of female active-duty students. Secondly, there is a gap in the literature regarding IHEs and the support resources they offer to this specific, nontraditional student population. The evidence of these gaps helped me to formulate and address the research question presented in this study: What are active-duty women's experiences of persistence in their online undergraduate degree programs? A basic qualitative research design was used to directly address this question.

The findings of this study revealed seven themes that summarized the experiences of the 13 interviewed participants. These themes included (a) learning in an online format; (b) gender differences/inequalities in the military; (c) mental/physical/emotional health issues; (d) military occupation demands; (e) deployments and movement; (f) family obligations; and (g) the need for increased institutional support resources. With

this reported information, IHEs can become knowledgeable about the unique experiences and challenges faced by active-duty women and use the information to develop informed, tailored resources to support the persistence of this specific student population.

Bean and Metzner's (1985) nontraditional student retention model was one of two conceptual frameworks used to guide this research. This model posits that college/university campuses must adapt their context to nontraditional students in order for those students to find success. This framework also places emphasis on how the external environment plays an important role in influencing the experiences of nontraditional students. Secondly, Angelino and Natvig's (2009) conceptual model for engagement of the online learner addressed various opportunities for interactions to occur between nontraditional adult online learners and their institutions, faculty, and staff. This consists of four strategic areas: recruitment, course work, post-course work, and alumni relations. The concepts within these two conceptual frameworks were reflected in the seven themes that emerged from the participant data findings.

Purposeful and snowball sampling were used to gather participants for this study. Thirteen interviewees were selected from a prospect pool of approximately 6,750 invitations. The inclusion criteria for these participants were (a) female gender, (b) active duty in the U.S. military, and (c) actively enrolled in an online undergraduate degree program.

The findings of this study provided the answer to the research question using two conceptual frameworks and the completed data analysis. The seven themes that emerged from the data align with existing research studies regarding the unique circumstances and

and experiences of nontraditional, military students and their persistence in higher education programs. As a result of this research study, evidence has been presented surrounding the perceptions of female active-duty students regarding their unique experiences with persistence in online undergraduate degree programs.

Interpretation of the Findings

The literature reviewed for this study covered research that has been conducted on military students, veteran students, nontraditional students, and issues surrounding persistence. The literature was minimal in any previously conducted research that focused specifically on active-duty women in online degree programs. The findings of this study may contribute to the gap in the literature in addressing the specific, unique challenges towards persistence faced by active-duty women in the U.S. military. Further, this research study may reinforce the concept that in order for nontraditional students such as active-duty women to find success in persisting in online degree programs, institutions of higher education must acknowledge their atypical experiences and tailor the student experience to support the needs and challenges of this population.

The 13 active-duty women who participated in this study shared their experiences with military life, the demands of their occupation, and the challenges they endured towards persisting in higher education while serving the military and their families. They also provided specific recommendations on some ways that IHEs can support their situations and resources that may help them persist. The seven themes that emerged from the collected data were (a) learning in an online format, (b) gender differences/ inequalities in the military, (c) mental/physical/emotional health issues, (d) military

occupation demands, (e) deployments and movement, 6) family obligations, and (f) the need for increased institutional support resources. Below is an interpretation of the findings by theme, as they correlate with the research question presented in this study, the conceptual framework, and the historical literature.

Theme 1: Learning in an Online Format

In Chapter 4, the findings of the study revealed that 12 of the 13 participants found that taking higher education courses in an online format was ideal for their situations. Only one participant found online learning to be challenging and not ideal. These opinions were attributed to their full-time military occupations, demanding schedules, financial situations, and familial obligations (William-Klotz & Gansemer-Topf, 2017).

The responses regarding learning in an online format aligned with Bean and Metzner's nontraditional student retention model in that college/university campuses must adapt their context to nontraditional students in order for those students to find success. Further, these students were more heavily influenced by their external environments than social integration variables. More recent literature on this topic has reported that the student experience is not prescriptive, linear, or homogenous. Active-duty women require a specialized, differentiated experience to perform and persist (Vacchi et al., 2017), and their external environment differs from a traditional students' external environment.

Theme 2: Gender Differences in the Military

Within the collected data, 12 out of 13 participants reported having experienced noticeable, significant gender differences in the military that caused increased challenges regarding their work life and the ability to persist in their online degree programs. The majority of the participants discussed the need to work harder to receive promotions and to prove their worth. Three participants with children also pointed out the expectations to perform well at work and still take on the majority of family and home obligations. Four participants mentioned that women also have to consider personality traits in the workplace in that women are expected to be less vocal and more sensitive than their male counterparts. According to the majority of the participants, the military landscape has not created an environment where women are treated equally, and this inequality creates increased challenges for active-duty women.

The literature review on challenges for women during military service provided that military occupations have been historically challenging for women. Today, the U.S. military culture still adheres to traditionally masculine values, creating an environment that continues to present challenges for active-duty women (Moore, 2020; Pawelczyk, 2016). Theme 3 regarding gender differences also aligns with Bean and Metzner's (1985) nontraditional student retention model, which emphasizs that nontraditional students are more influenced by their external environments. Active-duty women must consider both the military workplace and their home life as external environments. Challenges created in these two environments directly affect their ability to persist and be successful in online higher education programs.

Theme 3: Mental, Physical, and Emotional Health Issues

Eleven of the 13 study participants claimed to have or have had some variation of mental, physical, and/or emotional health challenges hindering their persistence in their degree programs. Only two reported no injuries at all. For the majority who disclosed their issues, these issues included PTSD; anxiety; chronic, localized muscular or joint pain; broken bones; increased stress levels; COVID-19; tethered spinal cord; surgeries; hearing loss; and vision impairment. All 11 participants who reported injuries had at least two or more injuries to include. Further, all 11 agreed that their array of injuries somehow directly impacted their ability to pursue their education and persist in their online courses.

In the literature review, Kalmbach and Moore (2020) discussed that many of today's military service members are underserved when it comes to mental health support. PTSD was reported as one of the greatest challenges that military students endure when it comes to educational pursuit and persistence (Cox, 2019). In a case study by the Student Veteran Health Program (SVHP), researchers reported that military students with mental health issues struggled with the retention of information, meeting assignment deadlines, and socializing with other students. It is clear from the injuries presented in the study conducted that health and injuries continue to be a challenge for female military students and hinder their efforts with educational persistence.

Theme 4: Military Occupation Demands

For this theme, all 13 participants reported ways in which the demands of their military jobs directly hindered their persistence in their online programs. These included

long, atypical work hours/workdays; special assignments; required volunteer service; demanding workloads; frequent travel; physically intensive job duties; and "on-call" status while off duty. Many of these descriptions align with the literature review where previous researchers such as Deshpande (2021) published the collective challenges of military students to include time management, family/personal/medical issues, technology issues, work–life management, college-specific issues, and financial issues. Volk et al. (2020) also presented collected data from 2,246 undergraduate students who indicated that many of their challenges were branch-specific and that different branches provide different levels of support surrounding active-duty education.

Based on the previous literature and the other themes that emerged from this research, the experiences reported by the study participants were indicative of job-specific hardships that they face that contribute to persistence challenges. According to Bean and Metzner's (1985) nontraditional student retention model, the information presented within this theme represents the characteristics that define active-duty students as nontraditional students and the specific challenges they face that challenge their success. For nontraditional students like active-duty women, institutions can benefit from awareness of the personal challenges that this student population faces and how these challenges affect members' experiences in higher education. Lastly, this aspect of participants' external environments clearly plays a role in how active-duty women experience their educational pursuits. The participants of this study provided examples of how the military environment differs, and as a result, active-duty women may benefit

from a specialized, tailored experience to support their persistence in online undergraduate degree programs (Vacchi et al., 2017).

Theme 5: Deployments and Movement

In the literature review for this study, deployments and movement were explored as areas of reported challenge for military students when it comes to pursuing higher education. Even with online coursework and flexibility, this theme continued to be a challenge for active-duty women who participated in this study due to the circumstances surrounding deployment and changes of duty station. Some reported challenges were loss of internet/technology capabilities, physical/mental/emotional stress of the moving process, change in job duties/responsibilities, leadership demands, and loss of downtime for taking education courses. Ten out of 13 participants reported these challenges to persistence as a result of deployments or movement during their time of service. Multiple participants agreed that deployments and frequent movement make educational pursuits and persistence nearly impossible.

Of the seven themes that emerged from this study, deployments and movement was a clearly articulated challenge to educational persistence. The nature of military deployments and the shift in responsibilities from stateside occupations create challenges to both persistence and retention. Many students reported having to drop classes or drop from their programs altogether as a result of their deployment demands (Renn & Reason, 2013). Ribeiro et al. (2022) also discussed similar issues related to frequent relocation or change of duty stations that align with this theme, including: changes to mental/physical/emotional health, potential decreases in support for all family members,

and changes in time management. These factors presented issues that expectedly align with those mentioned as a result of this conducted study.

Theme 6: Family Obligations

Family obligations are a challenge that resonates with nontraditional students both military and civilian. For military students, this theme differs in that military occupation obligations and family dynamics differ from those of civilian families. The ideals of the military promote that the needs of the branch come before the needs of any other facet of personal life. According to the literature on this area of interest, Hampson (2018) published that in military culture, based on interviews with 48 women (both military and civilian), stereotypes in the military promote that the identity of a working mother is not an ideal worker. This notion is the result of how the military views the ideal worker as one who is physically fit and always ready to report for duty. Motherhood potentially challenges both of these reported ideals.

According to the participants of this study, both marriage and parenthood have presented many challenges to being able to persist in online degree programs. More specifically, the challenges accompanying single parenthood, marriage to a fellow service member, multiple-children households, children with special needs, family time management, and lack of local support systems have all been reported as experienced challenges. The interviewed women reported struggles with childcare, marital issues, single parenthood, and occupational demands as hindrances to their ability to persist in their degree programs. These reported challenges also aligned with Bean and Metzner's nontraditional student model, which described how the unique needs of nontraditional

student populations such as active-duty women, require differentiated experiences and support in order to persist and succeed in higher education degree programs.

Theme 7: The Need for Increased Institutional Support Resources

The final theme that emerged from this study surrounded the need for increased institutional support resources. Ten participants expressed a need for additional, military-tailored support resources that directly address their unique circumstances and challenges. These requests included resources such as assistance with childcare; military-knowledgeable advisors; support groups of fellow military students; and instructors who understand their occupational demands and provide course flexibility, extra time for tests/assignments, and scheduling accommodations. Based on previous literature, Hart et al. (2017) emphasized the importance of IHEs introducing military students to the available services and resources prior to them beginning their coursework.

Kirchner and Pepper (2020) presented a best practice at one community college that piloted a program specifically tailored for military veteran students to get students acclimated with the campus using three categories, using an array of methods. These categories were information sharing, community engagement, and professional development. This is a direct example of Bean and Metzner's nontraditional student retention model, which demonstrates how one institution recognized the unique needs of veterans and developed a support program to address these needs and help them to persist. Based on the reported experiences and suggestions made by this study's participants, this information could be useful in informing IHEs of the needs of active-duty women and designing resources that address these challenges and needs.

Limitations of the Study

There were a few limitations within this study. The first limitation was regarding the sample size of student participants and the time required to collect the data. This study's sample consisted of 13 interviewees from whom in-depth responses were collected via interview. A broader scope could have presented more information if the study included more participants and if the timeline for conducting research had been extended. A second limitation was the number of institutions represented by the 13 participants. Only five different institutions within the United States were represented. Therefore, this study did not include the experiences of students from any other institutions or in any other countries. Thirdly, the study was limited to the experiences of online students and therefore did not include the experiences of students enrolled in onsite or hybrid degree programs. Generalizations should not be made beyond the scope of this study. The themes that emerged in this study may not be a consensus of the experiences of all active-duty female students outside of this scope.

Recommendations

This research study supplements existing research that has focused on the challenges to persistence among nontraditional student populations in higher education programs. The findings of this study revealed seven themes derived from the collected data, focused on the experiences of active-duty women and their persistence in online higher education degree programs. These results may offer both opportunities for additional research and key information in helping IHE administrations understand the

experiences of this specific student population so that they may develop institutional and offsite resources to support the persistence of American military women.

At the institution level, the first recommendation is that student success departments or personnel, review the seven themes presented in this study to gain an insightful understanding of the unique experiences of active-duty women as they pursue online undergraduate degrees; Specifically, theme seven which addressed suggested resources that the participants stated would be most beneficial for IHE administrators to provide in support of their persistence. These supports/resources included childcare, military-knowledgeable advisors, or support groups of military students within their institution. IHE administrators may consider being selective about their staffing processes when developing military-centric departments or teams to best serve this population.

The second recommendation would be for faculty to review the reported challenges and gain an understanding of how female active-duty students feel about the importance of instruction methods and faculty relationships as a part of their experience. Faculty might find value in knowing how to best address the challenges of these students and what resources/efforts can be offered from their level to support persistence for these military women.

The third and final recommendation is for future research studies involving experienced challenges to persistence in online undergraduate degree programs would be:

- including graduate level students into the participant selection;
- including military students who are taking courses from outside the continental United States;

- increasing the number of participants with a broader study scope;

- including the perceptions of IHE faculty and staff;

- increasing the number of institutions represented in the participant selection;

- a quantitative study that quantifies the impact involving active-duty women, their challenges, and their persistence rates in online undergraduate degree programs.

Implications

The implications for positive social change resulting from this research study might come from the increased, customized support of active-duty females in their challenges with persistence in online higher education programs. Previous studies have shown that over 60% of U.S. military college students have at least four risk factors that may hinder their ability to persist in school (Molina & Morse, 2017). This research provided detailed insight on other unique factors experienced primarily by female military students and how these factors affect their ability to be consistently successful in online higher education degree programs.

Following the COVID-19 pandemic, the landscape of higher education delivery methods shifted heavily to online delivery. This change in landscape opened a lot of opportunity to make positive adjustments to how students opting for this delivery model may experience their coursework. This is especially important for nontraditional students such as military members who have very different experiences than other nontraditional student populations. In this study, specific experiential details have been reported as shared by active-duty female participants and the resources that they have suggested be

considered by higher education institutions. This information was collected with the

purpose of improving the extent to which IHE administrations understand the experience

of a small demographic of their nontraditional student population. With this information,

institutions may be better prepared to develop evidence-supported ways in which they

can assist female active-duty students with on and offsite challenges that hinder their

educational persistence.

Previous research supports that understanding specific nontraditional student

challenges may help to support institutional initiatives that could lead to increased rates

of persistence (Christensen & Spackman, 2017). The overall findings of this study might

improve institutional knowledge, promote new persistence initiatives, stimulate the

ambition for continued research, and support a population of nontraditional students in

overcoming their hindrances so that they may find educational success while

simultaneously serving their country.

Conclusion

The experiences of female active-duty students in online undergraduate degree

programs was the focus of this basic qualitative study. Previous research was presented

that has addressed past military experiences and challenges. This study presented new

research surrounding the experiences and challenges as reported by the 13 interviewed

active-duty females. Finally, recommendations were provided on the institutional

resources female active-duty students may benefit from to support their efforts with

educational persistence. For institutions of higher education to experience an increase in

nontraditional student persistence rates, administrators must be aware of and understand

the unique challenges that these students experience as a result of their personal circumstances (Christensen & Spackman, 2017; Miller, 2014; Ren, 2022). Faculty should also be familiar with the challenges that their students face in order to best support their ability to persist and find success.

Persistence is an ongoing topic of interest within higher education research and student populations that struggle with persistence might benefit from research that is conducted on their specific challenges. This research has the potential to impact the design and development of student success-focused initiatives that recognize that the online higher education learning realm is not a one-size-fits-all experience. Finally, by having this knowledge we have the opportunity to create collaborative, sharable best practices that meet the needs of active-duty and other nontraditional students while creating environments of empathy, inclusion, and focus on success for all.

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Appendix A: Interview Protocol

Study Title: Active-Duty Women's Persistence in Online Undergraduate Degree

Programs

Interviewee:

Date:

Time of Interview:

Interview Introduction Script:

"Foremost, thank you for your service and thank you for your willingness participating

in this research study. You have been selected to participate in this study as you have

been identified as an active-duty woman in the U.S. military, currently pursuing an

undergraduate degree at an online institution. This research study seeks to inform higher

education institution administrations of the experienced challenges of active-duty women

towards persistence in online undergraduate programs. The findings may assist

administrations in making informed changes to the institutional support offerings,

programs, and/or resources for active-duty women and the unique challenges they face

toward persistence.

To facilitate the note-taking process, I would like to record our conversation today.

Before beginning the interview, I would like to briefly review some key points of this

study. As a reminder, and as outlined in the consent form, only myself and my

dissertation committee members will be privy to recordings and data collected in this

student. The consent form also includes that: (1) all information will be held confidential,

(2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm. All collected data will be securely stored and destroyed after five years.

The interview questions that follow are designed to directly address the research question and to generate data serves the purpose of this study. If at any time you need clarification on a question or need time to think, please do not hesitate to let me know. I have planned this interview to last no longer than one hour. During this time, I have ten questions that I would like to cover."

Participant Background:

"To gain insight on your background…"

What is your current branch of service:

What is your current station/location:

What is your current MOS:

What is your current degree program of study:

Interview Questions:

1. Military students are classified as nontraditional students. Nontraditional students are those who are adult learners, have full-time jobs, families, and do not attend college as a traditional on-campus student would. What have been your experiences as a nontraditional college student?

Follow up questions: What challenges have you encountered as a nontraditional student? Thinking about one specific challenge, what did you do to overcome that challenge?

2. Describe your experiences with attending your courses in an online setting.

Follow up questions: What challenges has the online setting presented for you? What might you have done differently to remedy any of these challenges?

3. Persistence is defined as the ability for a student to attend and complete courses in their program from term to term without interruption. What challenges have you experienced in persisting from term to term in your program?

Follow up question: Who or what resources did you seek out or access to help you persist from term to term?

4. Describe your experiences being a *female,* active-duty service member in a predominantly male career field.

Follow up question: Describe the persistence challenges in your online program as they relate to being a *female*, active-duty member in a predominantly male career field.

5. Tell me about the military occupation specialties (MOSs) you have held in your time of service including your current MOS.

Follow up question: How have the demands of your MOS(s) influenced your ability to persist term-to-term in your online program?

6. What family support do you have or have you had during the completion of your online degree program?

Follow up question: What family obligations have been a challenge toward your educational persistence? What assistance, if any, did you seek to help you with these obligations?

7. What experiences do you have related to military-specific obligations such as special assignments/duties, deployments, or permanent changes of station (PCS)?

Follow up question: How have these specific experiences influenced your persistence in your online degree program?

8. What challenges have you experienced related to physical injury or mental illness (such as depression, anxiety, or PTSD) as a result of your military service?

Follow up question: Describe how these injuries or illnesses have challenged your persistence in your program?

9. What institutional student support offerings, programs, or resources have you been offered in your experience as a nontraditional student?

Follow up questions: Based on your experience, describe how any institutional student support offerings, programs, or resources been supportive (or not supportive) of your persistence. Based on your experiences, what additional institutional student support offerings would best support your persistence?

10. What other information that was not covered in the questions above, would like to add regarding the challenges you have experienced with persisting in college and being an active-duty woman?

Conclusion script:

"That concludes the interview for today. I would like to reiterate my appreciation for your willingness to participate and for your contribution to the literature. After data analysis is complete and the findings of this study are recorded, I will be emailing you a summary of the findings for your review. During your review, please make sure the findings align with the information you provided and are an accurate representation of

your experiences. If you find that the summary does not align, please reach out to me

directly so that we may schedule a follow-up discussion to resolve the issue. Otherwise,

thank you again for your time and for your service. I wish you the best of luck in your

ongoing educational pursuits."

Post-interview comments and/or observations:

Appendix B: Participant Recruitment Email

Greetings Ma'am,

My name is Tara Clawson-Inga and I am a Doctor of Education student at Walden University. I am reaching out to you specifically as I believe you meet the criteria required to participate in my ongoing research study interview. I am respectfully requesting your participation in this important study as the results will support administrative changes within institutions of higher education that help active-duty women persist in their online college degree programs. The first 12-15 women to respond to this email with their willingness to participate in this brief 45 to 60-minute interview, will receive a $20 Amazon gift card (instant e-delivery) as compensation for your time and contribution to the academic literature.

Below are the details of the study-

Title: "Active-Duty Women's Persistence in Online Undergraduate Degree Programs"

Research method: 10 questions, open-ended, semistructured interview via Zoom

Time required: 45-60 minutes

If you are interested in participating in this study, please respond via email. Participation will be limited to the first 12-15 individuals to respond. Please feel free to email any questions about the study or the interview process. All information provided within this study is CONFIDENTIAL and NO NAMES or institution names will be published in this

research. Thank you in advance for your time and consideration of this request. And

thank you for all that you do to serve our country.

Respectfully,

Tara L. Clawson, MA, MAEd

Doctoral Student, Walden University

Appendix D: Social Media Participation Invite

As I embark on my research study for my Doctor of Education degree, I am reaching out to any active-duty women in the U.S. military who are currently pursuing an online undergraduate degree, to request your participation and contribution to the academic literature. The purpose of my research is to inform higher education institutions on the challenges that active-duty women face towards persistence in their online degree programs.

Study Title: *"Active-Duty Women's Persistence in Online Undergraduate Degree Programs"*

Participation Requirement: *10-question interview via Zoom*

Time required: *45-60 minutes*

*Participation will be limited to the first 12-15 individuals to respond and each participant will receive a $20 Amazon gift card upon completion of the interview. Please feel free to email any questions about the study. **All information provided within this study is CONFIDENTIAL and NO NAMES or institution names will be published in this research.***

If you are interested and meet the qualifications, please message me directly. Thank you for your consideration and most importantly, thank you for your service.