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**COMBAT ON AND OFF THE BATTLEFIELD: A MIXED METHODS STUDY
EXPLORING HOW NEW JERSEY AIR AND ARMY NATIONAL GUARD
UNDERGRADUATES PERSIST ACADEMICALLY THROUGH CRISIS**

by

Ariel J. Gilbert

A Dissertation

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
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at
Rowan University
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Dedications

This dissertation is dedicated to my late grandmother, Sibylle Silvan. As a holocaust survivor, and a single mother who raised a child through the dark period of communist Romania, she taught me how to be the strong, resilient woman I am today. Without her, there would not be my mother, and for not my mother, there would not be me. You are missed, but your strength lives on through me. This dissertation would not have been completed without your teachings, resilience, and eternal support. I love you.

This dissertation is also dedicated to all of who I have served with and alongside as part of the NJ Air National Guard. I am beyond thankful for all of your support, leadership, and friendship throughout my six years of service. This could not have been done without you all.

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To my mother, father, brother, and Sammie, thank you for your encouragement and patience. You all played a part in motivating and supporting me to succeed.

Abstract

Ariel J. Gilbert

COMBAT ON AND OFF THE BATTLEFIELD: A MIXED METHODS STUDY
EXPLORING HOW NEW JERSEY AIR AND ARMY NATIONAL GUARD
UNDERGRADUATES PERSIST ACADEMICALLY THROUGH CRISIS
2021-2022

Ane Johnson, Ph.D.
Doctor of Education

New Jersey Air and Army National Guard (NJAANG) undergraduate students endure multiple transitions throughout their academic career. In 2020, for example, the COVID-19 pandemic caused numerous activations and manning demands for the NJAANG population, further stressing coping methods. Using the follow-up, explanatory sequential mixed methods research design and Schlossberg's Transition Theory, I explored the academic persistence of the NJAANG undergraduate student population to better understand how and why NJAANG undergraduate students were able to persist through the heightened number of transitions during the COVID-19 health crisis. As an often-invisible group on campus, this study uncovered that NJANNG students were best supported through stabilizing continuity, supporting academic funding avenues, and an increase in physical and relational resources. Furthermore, this all leads to the question of whether or not higher education institutions are appropriately supporting their National Guard undergraduate students.

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Chapter 1

Introduction

First identified in Wuhan, China in December 2019, the novel coronavirus, COVID-19, quickly spread around the world, ravaging the economy, straining international relations, and devastating public health systems (O’Dea, 2020; World Health Organization, 2020). As COVID-19 cases rose worldwide, the United States braced itself for the virus’s landfall and impact. On January 1st, 2020, the first American patient was diagnosed with COVID-19, causing the suspension of flights from East Asia and the implementation of virus scanners in major airports (Kantis et al., 2020; World Health Organization, 2020). The United States confirmed its first person-to-person transmission of the virus on February 7th, 2020, starting one of the most extensive transitional periods in the past century (Kantis et al., 2020). Schools and businesses created plans for shutdowns or virtual learning, while hospitals across the country were seeking personal protective equipment (PPE) to ensure their staff’s safety (Educationweek, 2020; Salerno, 2020). By the start of April 2020, the CDC highly suggested that all Americans be wearing masks, causing a catalyst of transitions in everyday procedure that would soon be followed as each state implemented executive orders based on the virus’s threat (Dwyer & Aubrey, 2020).

New Jersey faced the seriousness of this unprecedented virus when the first patient in the state was officially diagnosed on March 5th, 2020 (Kantis et al., 2020; O’Dea, 2020). Within days New Jersey went into a state of emergency due to the rise of infections, causing public schools, businesses, and government agencies either to close immediately or transfer to virtual service (O’Dea, 2020). Unmasking its guise five days

later, on March 10, 2020, the first COVID-19 New Jersey citizen death was reported (Kantis et al., 2020). Given the spread rate and science behind the virus, immediate action needed to be taken so that the most densely populated state would be able to protect its citizens.

On March 16th, New Jersey Governor Philip Murphy announced that all school districts were beginning to close as of March 18th, 2020 and that higher education institutions were to move to online instruction (O’Dea, 2020). In addition, all state courts and government buildings were closed for all employees outside of essential workers, while gyms and businesses shut down resulting in an unemployment rate rising above 10% (Nieto-Munoz, 2020). By the end of the month, almost every New Jersey higher education institution had moved all of their classes to an online format (Smalley, 2020). Following the trend of closures across the nation, New Jersey students entered an unprecedented transition from the in-person learning to an online environment to mute the effects of this health crisis.

As the citizens of New Jersey started to adapt to the threat of the health crisis, the state militia was already in action. A crucial player in emergency responses for each state, the Air and Army National Guard aims to respond in the event of a natural disaster and protect the citizens of their state and nation from all enemies both foreign and domestic (Doubler, 2003; Foot; 2020; Listman & Doubler, 2007). With days passing, the threat of the virus increased, and action needed to be taken to slow the virus’s spread and assist at-risk communities. In immediate response to the rising infection rates, Governor Murphy activated over 100 New Jersey Air and Army National Guard (NJAANG) members to support medical personnel and secure and build impromptu field medical

stations, veteran home assistance teams, and COVID-19 testing facilities (O’Dea, 2020). As the infections rates continued to increase, the number of NJAANG members activated rose to 700, with members assisting in testing locations and nursing homes across the state (Hecht, 2020; O’Dea, 2020). The activations continued through May of 2021 with over 1500 NJAANG activated as vaccination distribution and veteran homes needed operational staffing and continued assistance (Axelrod, 2021; Levinsky, 2020). When Governor Murphy activated these members to aid in the COVID-19 effort, they had to leave their families, their academic endeavors and often take temporary absences from their civilian careers.

The COVID-19 activation forced NJAANG members into an unknown military environment for an unspecified period. For those members who were also full-time students, this meant disruption to their academic responsibilities along with their civilian lives. Considering the large number of a military-funded students in higher education (Gainey, 2018; Rumann & Hamrick, 2010; Zinger & Cohen, 2010), it is vital to identify and research how students can cope with these unique challenges. This research explores how NJAANG undergraduate students successfully and unsuccessfully persisted through their educational coursework during their military activations throughout the COVID-19 public health crisis. Such research can assist New Jersey higher institutions in gaining a better understanding of this student population, which in turn, can provide additional resources, policies and practices to facilitate better support for NJAANG undergraduate students.

History of Military Funding and Enrollment

One of the leading reasons that students enter the military is the appeal of the educational benefits provided by the commitment to serve (Zinger & Cohen, 2010). Beginning in 1862, the Morrill Grant assisted with the integration of military training and tactics into higher education (Rumann & Hamrick, 2010; Cohen & Kisker, 2010). In 1916 the establishment of the Reserves Officer Training Corps (ROTC) programs within higher education institutions became the catalyst to increased enrollment (Rumann & Hamrick, 2010; Gainey, 2018; Cohen & Kisker, 2010). ROTC program data evidenced that enrollment increased sharply, with 36% of the United States military officers stemming from these institutions (Rumann & Hamrick, 2010). With the increase of the military student population after the creation of ROTC programs at universities nationwide, it became apparent that students were willing to enroll in the military in exchange for free or low-cost tuition.

Given the increased enrollment from ROTC programs, the United States Military started to see the benefit of higher education for military members. As a result, the Servicemen's Readjustment Act of 1944 was enacted and the creation of the GI Bill revolutionized military benefits for service members (Cohen & Kisker, 2010; Olson, 1973; Rumann & Hamrick, 2010). About two million of the 14 million eligible veterans used their GI Bill tuition assistance by 1950 (Rumann & Hamrick, 2010). The tuition assistance within the GI Bill allowed military members to propel their careers both in and out of the military by easing funding restrictions for education (Rumann & Hamrick, 2010). As military students enrolled in higher education institutions, the student bodies evolved in both number of students enrolled and diversity of the student body (Rumann

& Hamrick, 2010). The increase in enrolled students continued with the Readjustment Assistance Act of 1972, which saw almost half of Vietnam veterans enrolled in higher education, eventually leading to graduates making more money than their civilian counterparts (Rumann & Hamrick, 2010; Angrist, 1993). As military education funding policy adapted to increase access to undergraduate programs, the military became more attractive. It was evident that policy changes generated avenues to obtain higher education and made the military more attractive in return.

The evolution of the GI Bill continued to shape based on the needs and wants of the military students, in conjunction with the outlook and vision of the financial assistance program from the Federal Government (Dortch, 2017). The Post-Korea and Vietnam-Era GI Bill, also known as the Veterans' Readjustment Benefits Act of 1966, was implemented after the conclusion of the Korean War's (1950-1953) and was in effect from 1966 to 1989 (Dortch, 2017; Westheider, 2015). The focus of the updated statute was the additional benefit of providing educational assistance to active duty and post-service military members (Dortch, 2017; Dortch, 2021). With greater access to education for in-service military members, the Veterans' Readjustment Benefits Act of 1966 was seen as more attractive and created a shift of focus from military recruitment to academic retention (Dortch, 2017). Additionally, the Post-Vietnam Era Veterans' Educational Assistance Program (VEAP) offered educational benefits for military members serving on active duty between 1976 and 1985. Marking its distinction, VEAP included educational benefits for an all-volunteer force, requiring military members to contribute toward their educational benefits, and being applicable for reserve and active duty military members from the start of their contracts (Dortch, 2017).

As the military student population rose, the United States government implemented and adapted the GI Bill to shift back and focus on the attraction of the prospective military recruit. The Montgomery GI Bill, enacted in 1984, revamped the old GI Bill introducing incentives such as the Veterans Assistance Loan (VA Loan) and other enhanced educational benefits that created a variety of financial support options for military students (Doubler, 2003; Cohen & Kisker, 2010, U.S Department; 2013). This was later enhanced in 2008 with the Post 9/11 GI Bill which continued to advance military benefits by providing funding covering tuition and fees (now transferrable to dependents) while adding housing, food, and living expenses not seen in the Montgomery GI Bill (DeCoster, 2018; U.S Department, 2013). One of the Post 9/11 GI Bill's main attractions was that there was not a pay-in system, unlike the former Montgomery GI Bill where military members continued to pay into it to receive benefits (DeCoster, 2018). Showing its benefit, Dortch (2021) reports that the Post 9/11 GI Bill is estimated to support and benefit over 600,000 members, veterans, or family members. All funding options lured young Americans to join the military by providing funding pathways to education. As a result, students were given educational opportunities, the military gained members, and the higher education institutions benefitted by increased enrollment.

The National Guard

The nation's state militia, the National Guard, also benefited from the increase of higher education funding options, but given the grave differences between the active duty and National Guard environment, the National Guard students face different challenges. The National Guard has missions beyond their state projects, such as assisting with federal missions, causing activations for both local and national issues (Listman &

Doubler, 2007). Unlike their active duty counterparts, the time commitment for a traditional National Guard members is approximately two days out of the month and two weeks of annual training at a minimum (Doubler, 2003). National Guard members can be activated for federal or state emergencies with little to no notice for unknown periods (Doubler, 2003; Foot, 2020). Because of this unpredictability, National Guard undergraduate students are forced to balance completing their education while also being ready to drop everything and assist, at a moment's notice, in any federal or state mission.

The unpredictability and challenges that come with a commitment to the National Guard can deter students from enrollment in undergraduate programs. The National Guard tuition waiver provides undergraduate students an opportunity to serve and obtain a free or low-cost education to attract members (NJ Army Guard, n.d; Walters, 2006). Every state has its own National Guard education benefit packages tailored to its needs. For example, the NJAANG provides a tuition waiver for 100% free undergraduate tuition at any New Jersey state public higher education institution (NJ Army Guard, n.da). The tuition waiver allows members to attend the New Jersey public higher education school system with the confidence that it will be tuition-free while also being able to receive money from the Montgomery GI Bill Select Reserve, an adjusted form of the traditional Montgomery GI Bill for part-time service, to pay for books and other school supplies (U.S Department of Veteran affairs, 2020b). Although beneficial, the waiver is also restrictive because a student must attend a New Jersey public higher education institution to be eligible for the benefits. If one attends an institution outside of the state higher education system they do not qualify for the state waiver (though federal GI BILL educational benefits may still apply) (U.S Department of Veteran Affairs, 2020b). Given

that National Guard students can use both the Montgomery GI Bill and the state's tuition waiver package, many undergraduate students are willing to tailor their higher education experience to include serving in the military.

Military Student Transition

National Guard members continually transition from their civilian to military status throughout their career. Whether it be a state activation or overseas deployment, National Guard members are forced to halt their educational benefits to report and fulfill their duties (National Guard, n.d; Rumann & Hamrick, 2010). Due to the advancement of educational benefits with the GI Bill and National Guard tuition waiver, part-time units have become more attractive, despite the acceptance of the National Guard student status continually changing (Rumann & Hamrick, 2010). Even with the elevation in attraction the continual transition did have an impact on persistence , a 2006 study found that 80% of all higher education intuitions with undergraduate military members have veteran students withdraw from classes due to military service (Rumann & Hamrick, 2010; Woo, 2006). Despite elevating withdrawal rates, military students continued be interested and lured by the attractiveness of educational benefits, with a study finding that 90% of military students in 2012 registered for undergraduate programs (Rumann & Hamrick, 2010; Vacchi, 2012). Given an access route to higher education, military members are seeking to obtain their undergraduate education, despite the risks of interruption due to service commitments.

With little focus on the transitions of National Guard members who are also students, there is a lack of understanding in how to support this student population. Higher education institutions typically miscategorize or stereotype military students as

nontraditional, attempting to assimilate them to traditional or generalized nontraditional student groups (Vacchi, 2012). A recent study found that within the 2011-2012 school year, public higher education institutions nationwide saw National Guard undergraduate students as the dominate military service attending both four and two year institutions (Molina & Morse, 2015). Despite this, National Guard students are still misappropriated under the generalized military sub category of a non-traditional student (Vacchi, 2012). This is problematic as higher education institutions apply universal policies or ideals of a nontraditional students, while ignoring the services that military students and the subsets of military need in comparison to other nontraditional student groups (Vacchi, 2012). Given the lack of understanding and high withdrawal rate of military members, instructional methods and programs tend to be generalized rather than tailored to their needs (Vacchi, 2012). The literature indicates that persistence for military students going through multiple transitions lacks research, is misunderstood, and needs foundational studies to uncover their specific needs (Vacchi, 2012). Without further research, military students' miscategorization enables the lack of persistence despite high enrollment rates.

Furthermore, military student persistence is challenged by feelings of intimidation when faced with starting over their life or the overwhelming stress of reverse culture shock upon returning from deployments (Decoster, 2018). Military students tend to want structure and team-based atmospheres that higher education institutions may not provide, impacting their confidence to transition back to the classroom (Vaachi, 2012).

Additionally, military student's value trust and responsibility, given the importance and honor of the rank structure instilled from the military. (Vaachi, 2012). The National Guard student faces many of the same issues that their active-duty counterparts do as they

transition back into civilian life. The difference for the National Guard student is the educational transition into and out of the classroom. This occurs continually and is accompanied by additional transitions given the various responsibilities of the typical civilian life that an active-duty counterpart may not face as frequently.

Problem Statement

The experiences of active duty, reserve, and National Guard components of the military can significantly differ and create many differences throughout transitions. 30% of National Guard students have four or more risk factors for completing their undergraduate degree (Molina & Morse 2015). National Guard members are an essential part of public, higher education institutions population nationwide, with National Guard students comprising the highest percentage out of all of the military components with 26% of the military population at public four-year schools and 37% at public two-year schools (Molina & Morse, 2015). Despite the representation of National Guard students, research tends to hyper-focus on active duty or overseas deployment transitions back to the higher education environment (Burrow, 2020). National Guard students differ greatly from other military service members and need support based on their continuous transitions through civilian, health, educational, and military environments to foster persistence in their classwork and commitments (Air National Guard, 2020; Molina & Morse, 2015 National Guard, n.da; National Guard, n.db). Although the COVID-19 pandemic was the first of its kind, National Guard members across the nation will continue facing activations in which they will be challenged to persist through their education despite continually transitioning between active and non-active statuses.

For NJAANG undergraduate students, state of emergency activations are an understood part of the requirements derived from the commitment to honor their contract. These students often go on orders for a length of time to complete training or for volunteer initiatives for supplemental manpower (Listman & Doubler, 2007). Although activations, deployments, and annual training orders are understood, many of the NJAANG members are undergraduate students enrolled in institutions across the state and are continually transitioning from military to civilian environments. When a NJAANG member is an undergraduate student, an additional transition from the military to the educational environment occurs when there is a leave of absence, a return to the classroom, or a change in instruction method. NJAANG members are continually balancing multiple transitions at once, causing interruptions and the weight of responsibilities that their active-duty colleagues may never face at once (Listman & Doubler, 2007).

The student population at higher education universities are broken into many groupings in order to best serve a variety of different populations and avoid assimilation to one student type. NJAANG undergraduate students can be inappropriately categorized with other military branches or assimilated as a non-traditional student (Vacchi, 2012). Although NJAANG students do share similarities with the other military services, there is a great difference in experiences and transitions given their citizen-military status (Vacchi, 2012). Additionally, National Guard students nationwide attended public institutions at a higher rate than any other military grouping (Molina & Morse, 2015). As a prominent military group at public intuitions, and the differences they face in compared to other non-traditional students and military students, to persist with the miss

categorization is enabling the continuation of improper services to this undergraduate student population.

The COVID-19 activation was unprecedented for the United States and stress transitional coping methods of NJAANG undergraduate students. Not only did they transition between educational, civilian, and military environments, but there was also a change in the health and safety of their overall surroundings that impacted each transition. Given the novelty of the COVID-19 activation, examining undergraduate NJAANG students who persisted will provide insight into areas that directly impacted a NJAANG undergraduate student's ability to persist during a health crisis.

Purpose Statement

The purpose of this mixed-methods, explanatory sequential design study is to identify how and why NJAANG undergraduate students persisted through their coursework while serving during the COVID-19 health crisis in order to better understand and assist the NJAANG undergraduate students through multiple transitions. The NJAANG undergraduate student population differs from the military's active duty and reserve components due to the state-oriented missions and varied, unpredictable transitions that occur for an NJAANG student. This study's participants are current and former NJAANG members who were undergraduate students at New Jersey higher education institutions throughout the health crisis activation and service period including and through the spring 2020-2021 semesters. The study methods included a survey to identify eligible participants and gather descriptive data, such as demographics, credit higher education institution, and length of military service. After collecting data from the surveys, a subset of participants volunteered to participate in interviews that would

investigate in-depth the transitions experienced by students, their transition behaviors, and the connection to persistence

This study, uses an explanatory sequential mixed method design. Data are initially gathered in the quantitative phase through a survey instrument exploring academic persistence throughout the health crisis. Results were analyzed and shaped the second, qualitative interview phase. Throughout the qualitative phase, participants were interviewed using a protocol shaped by Schlossberg transition theory to determine how persistence was or was not supported based on the four determining sections of support within the theory. Schlossberg's transition theory provides four sectors, referred to as the 'four Ss,' that will provide the theoretical basis for persistence through a transition (Patton et al., 2016) as conceptualized in this study. By viewing the 'four S's' of NJAANG undergraduate students using a mixed-method, explanatory sequential design, and recommendations emerged as to how to support these students and their persistence during transition. By combining the data from the quantitative survey instrument and qualitative interview, it allowed the research to best understand how NJAANG undergraduate students persisted and why persistence was or was not supported throughout the multiple transitions of the health crisis.

Research Questions

The following are the research questions for the study:

1. To what extent do NJANNG Undergraduate students who were activated for COVID-19 persist within the higher education system?
 - a. Does the persistence differ based on race/ethnicity, gender, socioeconomic status, or age?

2. How do NJANNG undergraduate students describe the impact of the timing of the health crisis on their coursework? (Situation)
3. What values do NJAANG undergraduate students describe as having the most influence on their ability to persist through their coursework during the health crisis? (Self)
4. What higher education institution social supports do NJAANG Undergraduate students report experiencing that aided in their ability to persist through the health crisis? (Support)
5. How did NJAANG Undergraduate students use coping mechanisms to persist through their coursework during the health crisis? (Strategies)

Definition of Key Terms

Activation

For the purpose of this study, any reference to “activation” or “activating” or in an “activation status” refers to an NJAANG member who is called from part-time to full-time military status. For the COVID-19 pandemic, NJAANG members moved from a part-time to full-time status on orders from the governor of New Jersey and the federal government (O’Dea, 2020). Due to COVID-19 infecting the entire United States, the federal government provided funding for NJAANG members to move to full-time status and be “activated” to assist with the pandemic within their state for a certain duration of the transition to full-time. At other points, the state of New Jersey utilized its funds to move the members from part to full time. Even with the funding difference, the use of the term activation will stay consistent because all NJAANG members stayed within the state of New Jersey.

Non-Traditional Student

For the purpose of this study, any reference to “non-traditional student” is in line with the Ely (1997) use of the term, meaning a population of students who are older and enrolled in either a part-time or full-time status. Additionally, a non-traditional student may have returned to school while balancing family commitments, employment, and other outside financial responsibilities (Ely, 1997). This group of students is a subset of the higher education population and often encompasses a wide range of minority students (Ely, 1997). This group can be viewed as a challenge or turbulent in their success and/or persistence given the weight of their commitments outside of their education (Ely, 1997). Despite their challenges, non-traditional students are highly motivated, and highly contributive to their learning compared to the traditional student (Ely, 1997).

Persistence

For the purpose of this research, persistence is defined as the ability to continue and complete undergraduate coursework for NJAANG members. In reference to Schlossberg's transition theory (1981, 1984), the NJAANG member will have persisted through the various transitions based on the support of the ‘four S’s’ that impact transitions (Patton et al., 2016). Throughout the study, persistence variables will be explored in relation to the ‘four S’s’ to determine which combination or exact sectors helped the NJAANG members continue and complete their coursework.

Orders

For the present study, an order is defined as is an official military document that provides the military member the information on the length, location, and operation they will be supporting. There are many different types of statuses and orders that a NJAANG

member can be on that represent either a mandatory activation or training. The word “order” will represent all the following types of orders and stipulations that qualify for the study: a state-mandated order to assist with a COVID-19 related mission, an annual training order of two weeks or more to complete training or assist with tasks at a duty station or specific training environment, or a specific training order of two weeks or more that is in support of a duty station to replenish manpower or assist with COVID-19 related needs.

Theoretical Framework

When looking at the NJAANG population, it is important to look at the whole self-given the various roles this population takes on. Given the great number of responsibilities this population has in their civilian, educational, and military lives, this study’s theoretical framework is Schlossberg's transition theory (1981, 1984). Patton et al. (2016) describe this theory as widely used in adult development literature that focus on transition. Goodman, Schlossberg, and Anderson (2006), further explore the following three transitions under the theory: anticipated, unanticipated, and nonevents. Given the nature of a health crisis, this study applies the framework in the area of an unanticipated transition, or a transition that is unforeseeable (Goodman et al., 2006). Because of the unanticipated transition, NJAANG members were unable to foresee possible changes in their daily lives and had to immediately adapt in all environments.

Schlossberg's transition theory segments the ability for someone to cope through transitions into the following four sectors (four S’s): situation, support, self, and strategies (Goodman et al., 2006). Based on the theory, dependent on the resources in the ‘four Ss’, it will determine the amount and types of risk factors someone has on their

ability to persist throughout the transitional period. As Schlossberg et al. (1995) explain, this ratio of resources to liabilities may occur due to the difference in reaction per individual given a particular transition at a specific time. The framework is appropriate for this study due to applying the four Ss to the unanticipated transitions of the health crisis that occurred to NJAANG members during their time on orders. In addition, it provides a unique opportunity to explore different variables that may have impacted their ability to persist.

Significance

NJAANG members are encouraged to enroll in higher education programs as part of their benefits package. Despite this tax-funded initiative, NJAANG undergraduate students are understudied and often misconceived as a typical non-traditional student. NJAANG members continually transition between multiple environments. It is imperative that higher education institutions, military organizations, and NJAANG members themselves are equipped with up-to-date knowledge and resources. This will ensure that current practice and policies accurately reflect the needs of an ever-evolving NJAANG undergraduate student population.

Practice

NJAANG members are different than other undergraduate student populations and often miss-categorized. This may have led higher education institutions to apply a set of generalized characteristics to the NJAANG population. An exploration of persistence for NJAANG students will provide insight for educational leaders to be able to have some understanding of NJAANG member's specific needs. By having this understanding of persistence to Schlossberg's transition theory (1981, 1984), this study helps contribute

to higher education personnel in leadership positions by identifying the various sectors of the ‘four S’s’ that either hindered or supported persistence in NJAANG members. This information can be used in coordination with the student veteran’s office, mental health office, and the academic advising department to develop the best plans for when students are experiencing multiple transitions to facilitate a least restrictive environment.

New Jersey higher education institutions looking to increase their NJAANG student population can use this study as the basis of additional research to strengthen NJAANG student recruitment and retention. In Benbow (2020), active-duty military transitions that occur due to deployments or retirement are explored to show higher education institutions how this population persists. While NJAANG members can deploy, their active-duty counterparts are never continually transitioning from a civilian to active-duty status while simultaneously experiencing multiple other transitions. This impedes the ability to fully grasp the needs, supports, and ability to persist for undergraduate NJAANG students. By having a foundational study within this area, specifically targeting NJAANG students, New Jersey institutions can use this information as a starting point to ensure that their practices are equitable in support for this student population.

Policy

Military student policy revolves around financial funding programs due to the amount of state and federal taxes appropriated to them. Outside of the Montgomery GI Bill Selected Reserve, the part-time service option of the Montgomery GI Bill, NJAANG students are also provided the New Jersey National Guard tuition waiver (U.S Department of Veteran Affairs, 2020b). These two military student financial aid options are governed by policy on both the state and national levels. For the Montgomery GI Bill

Selected Reserve, students must be enrolled in a full-time class schedule, which may influence the decision to persist (Attrino, 2020; U.S Department of Veteran Affairs, 2020b). In addition, a member who is ending their NJAANG contract might have been pressed on their decision to persist due to the active service requirement in the Montgomery GI Bill Selected Reserve policy and the NJAANG tuition waiver. If a NJAANG student was on orders during this period, it may have impacted their persistence by weighing how close they were to the end of their contract in relation to the number of semesters they had left with their degree (Attrino, 2020; U.S Department of Veteran Affairs, 2020b). Unlike the NJAANG tuition waiver, the Montgomery GI Bill Selected Reserve can be extended on the number of months a member is put on active-duty orders (U.S Department of Veteran Affairs, 2020b). In turn, perhaps providing a little more flexibility if the member had been on active-duty orders prior that qualified them for the post-service extension.

The COVID-19 activation, along with the concurrent transitions for NJAANG undergraduate students, required quick decision-making. Regarding educational funding, NJAANG students were uncertain if the transition in educational environments, from in-person to online, would hinder their ability to use the Montgomery GI Bill Selected Reserve. This was troubling because some of the NJAANG members dealt with contract timelines and the overall need for monetary support for school. Due to the change in status from in-person to online instruction, and the overall closures of campuses, the Department of Veterans Affairs advocated on the veteran student's behalf, and President Donald Trump signed Public Law 116-128 with Public Law 116-140 following (U.S Department of Veteran Affairs, 2020a). These laws created the Student Veteran

Coronavirus Response Act of 2020, which allowed the Department of Veteran Affairs to temporarily continue providing educational benefits for military members Monthly Housing Allowance (MHA) for the GI Bill program (U.S Department of Veteran Affairs, 2020a). This also allowed students to receive benefits no matter if the status of their classes were online or in-class and included classes between the Spring of 2020 and December 21, 2021 (U.S Department of Veteran Affairs, 2020a). NJAANG members were to be at ease with both the National Guard tuition waiver and Montgomery GI Bill Selected Reserve benefits continuing to support their education.

Research

Current research of transitional persistence within the undergraduate National Guard population is limited. Given the lack of activations related to the United States' health crisis, research on the state's National Guard is either conducted within the military organization for traditional war-related activations or non-existent. With the foundation of military student research focusing on the active-duty population, this study aims to supplement current research to embrace the National Guard component's inclusion in higher education (Decoster, 2018; Rumann, 2016; Vaachi, 2012). By exploring this study, higher education institutions, in and outside of New Jersey, will gain an understanding of the supportive areas for both the ability to and lack of persistence in education for this population. In turn, this will aid educational leaders in providing up-to-date information to their veteran departments to retain and improve success within the undergraduate National Guard student population.

Higher education institutions, the NJAANG, and the NJAANG student all have a part in ensuring a military student's success and can benefit from the information

gathered. Beyond supplemental information for veteran programs, higher education institutions can use the information from the study to update programs, identify areas in need of updates in practice and procedures, and provide insight for National Guard organizations creating educational benefits and support programs. The research results can be a catalyst for further research on the National Guard undergraduate student beyond New Jersey or as a foundation for continued research within the population as the National Guard student evolves through the continually changing military environment.

Delimitations

Upon review, there are several limitations to this study. One limitation is the narrow focus on the NJAANG population. This research excludes other part-time and active-duty services of the United States Military, and it continues to narrow in scope by excluding other National Guard undergraduate students outside of New Jersey. Despite the identification of the limitation, a narrowed approach allowed a focus on the varied resources and missions each Air and Army National Guard faces and the differences in each state's higher education institution response to the health crisis. Due to the importance of inclusion and increased population that other part-time services have at higher education institutions across the nation, it would be beneficial for a secondary study to be conducted to create a more comprehensive and generalized national recommendation.

Another limitation is the narrow focus on the COVID-19 pandemic as the catalyst to transitions for NJAANG students. I selected this health crisis based on the unprecedented number of transitions within a short time period and the potential to highlight the challenges that NJAANG members face. Given the novel nature of the virus

occurring within the United States, this study provides a unique opportunity to identify many aspects of transitions that may have impacted persistence through coursework for NJAANG students. A possible resolution to this delamination is identifying previously conducted studies that may include other transitions that are similar in nature to a varied number of concurrent transitions.

In addition to the limited scope and narrowed focus on the COVID-19 health crisis, one limitation lies within the procedural structure of the mixed methods explanatory sequential design. As part of the study, access to the participants can be gained through the IRB process or the military change of command. A challenge of explanatory sequential design is planning the qualitative phase to present for an IRB review. Since the survey tool is used in the first phase of the study, it is difficult to explain to an IRB or review board because of the lack of specificity the questions asked or the exact participants until the information from the quantitative phase has concluded and the data has been collected (Creswell & Plano Clark, 2018). I provided a tentative framework of the qualitative phase of the study to the IRB and review boards on the questions used and the process of participant selection (Creswell & Plano Clark, 2018). Within the tentative framework, there is an acknowledgment of the possible need for revision on the tentative plan and an addendum will be submitted upon the completion of the quantitative phase (Creswell & Plano Clark, 2018).

When using the explanatory sequential design, there was an additional limitation within the quantitative phase of the study that needed to be addressed. During this phase, the study attempted to identify areas to further expand upon within the qualitative phase (Creswell & Plano Clark, 2018). As I applied this design, I attempted to identify the

areas needed for further explanation upon conclusion of survey collection (Creswell & Plano Clark, 2018). To attempt to resolve or mitigate this limitation, I attempted to identify any strong predictors in the attempt to further supplement the IRB tentative framework and continue to show possible directions of the study (Creswell & Plano Clark, 2018).

Overview of Dissertation

This dissertation is in manuscript style and separated into six chapters. The first chapter provided the overview and history for the National Guard undergraduate student's evolution and the lead-up to the COVID-19 health crisis. This chapter facilitated the building of an outline with the following sectors: the purpose of research, research questions, key terms, theoretical framework, limitations, and significance of research to policy and practice. The third chapter will focus on the reasoning for mixed-methods explanatory sequential designs as the coined research methodology for the research. In addition, there will be a discussion on the logistics of the research regarding strategy inquiry, participant selection, and data collection techniques. The fourth chapter will provide a broad overview of the study's findings in relation to the research questions. The fifth and sixth chapter will highlight specific findings and subsequent discussion, implications, and recommendations in the form of two journal articles, with the intent to publish.

Chapter 2

Literature Review

In the following chapter, I explore the significant research that has informed and contributed to the conceptualization of this study regarding National Guard undergraduate student transitions. Given the focus of my study, and the multiple transitions occurring during the COVID-19 health crisis, there are various resources supplementing major references to best emphasize the limitations and strengths existing within the relevant literature.

Persistence

The exploration of persistence through higher education became popular in 1975 when Tinto's Student Departure Theory was first constructed (Tinto, 1975). Inspired by Durkheim's (1951) work, which focused on the probability of suicide occurring dependent on the levels of social regulation and integration within a society, Tinto identified a common relation between a person committing suicide and a student failing out of school due to inappropriate integration (Tinto, 1975). As research surrounding persistence evolved over the late twentieth century, the outlook shifted to a sociological perspective and specific attributes between nontraditional and traditional students pertaining to dropout rates emerged (Pascarella & Terenzini, 1991). This shift continued to move persistence research from hyper focusing on traditional and nontraditional groups of higher education students to individual assessments and relationships (Pascarella & Terenzini, 1991).

Proceeding Tinto's Student Departure Theory (1975), studies about persistence in higher education uncovered different supports that facilitated students in their ability to

persist through their undergraduate work (Mallette & Cabrera, 1991; Terenzini & Pascarella, 1977; Tinto, 1998). The following are the supports that facilitate persistence for higher education students: student involvement, having student mentors, academic integration, social integration, and degree involvement (Pascarella & Terenzini, 1980; Rendon, 1994; Stage, 1989; Terenzini & Pascarella, 1998). All of the supports were important to identify to ensure that students enrolling in higher education institutions were not only enrolling and withstanding the collegiate environment, but also finding success by persisting through their coursework.

Academic and social involvement, two of the supports noted in the research preceding the conclusion of Tinto's Student's Departure Theory (Astin, 1984; Mallette & Cabrera, 1991; Terenzini & Pascarella, 1977), were found to be a main contributor to higher education student success (Tinto, 1998). The more a student interacted with members of the higher education community, such as faculty, staff, and students, the more likely they were able to persist (Tinto, 1998). Higher education students were found to benefit from student mentors who demonstrated the ability to proficiently interact both academically and socially with various levels of the school community (Rendon, 1994; Tinto, 1998). Students were able to gain a greater sense of attachment and value to their school community by observing student mentors' values and being involved in both social and academic settings (Tinto, 1998). As a result, higher education students gain skills that facilitate persistence by mirroring the acquired skills when opportunities to be socially or academically involved arise.

While academic and social involvement are critical to higher education persistence, there are differences in how these manifest based on the type and location of

each institution. For example, students may spend different times on campus based on the institution type (two year or four year) (Tinto, 1997; Tinto, 1998). Braxton et al. (1997) explored the importance of social integration between two-year and four-year academic institutions and found that social integration holds more weight to students at four-year institutions causing a shift in how persistence may be impacted. Additionally, the location of the higher education institution may cause a difference in the ability for someone to be more social on or off campus (Tinto, 1998). A four-year urban school compared to a two-year rural higher education institution may have varying factors that facilitate or bar a student's ability to be involved and interact with their peers on campus (Tinto, 1997).

Military Student Academic Persistence

While Tinto's (1975) theory was the catalyst for higher education student persistence research, its applicability to the military student population was not the focus. Tinto continued to critique his theory, and in 1993 he revised his student departure theory to address the need to focus on subcultures within the higher education student population as it relates to student roles on campus, engagement with community, and retention (Tinto, 1993). Straying from academic integration, Tinto's 1993 revision allowed for the inclusion of external environmental factors, thus creating a model that allowed to see persistence of individual subgroups as more than just the assimilation of social characteristics. Despite this, Ackerman & DiRami (2009) emphasized that military students are still typically considered nontraditional students within persistence research models, and given that Tinto's (1975, 1993) theory continues to focus on the generalized subgroups of the higher education student population, applying Tinto's student departure theory may not be appropriate. Understanding persistence for the military student

population was emphasized when Vacchi and Berger (2013) stressed the importance of identifying and researching persistence in relation to student subgroups, rather than forcing assimilation amongst military students to the traditional and nontraditional subgroups. Jenner (2017) argues that the military student population is vastly different from traditional and nontraditional student groups and should be further researched as an individual subgroup.

As research started to focus on the military undergraduate student subgroup, social support was found to be one of the leading factors in support of academic persistence (Ackerman et al., 2009; DiRamio, 2011; Rumann & Hamrick, 2010). Additionally, literature emphasized the importance for relationships, social encouragement, mentoring, and support services for post-traumatic stress disorder (PTSD) on higher education campuses for military students (Ackerman et al., 2009, DiRamio, 2011, Rumann & Hamrick, 2011, & Smith-Osborn 2009). Karp & Klempin (2016) expanded on factors that supports persistence for the military student population by noting the importance of increased commitment, identification of goals and aspirations, and developing multiple layers of support throughout the higher education community. While it is notable that persistence research has steered toward the military student population, the lack of depth in this subgroup of the higher education student population highlights the need for further research.

The College Persistence Questionnaire

The college persistence questionnaire (CPQ) is a survey instrument designed for higher education institutions to identify areas that supported undergraduate, first year student persistence in order to reduce attrition and identify at risk student populations

(Davidson et al., 2009). At risk students, for the purposes of the CPQ, are students who are showing signs of a lack of persistence and may not return for their sophomore year (Davison et al., 2009). When Davidson et al. (2009) created the CPQ, it was a 53 item, Likert-scale response method questionnaire and was tested by conducting two studies to determine the validity and reliability of the questionnaire. The first study was a component analysis of about 2,000 first-year undergraduate students across four different institutions. This first study yielded six different reliable factors including the following variables: institutional commitment, degree commitment, academic integration, social integration, support services satisfaction, and academic conscientiousness (Davidson et al., 2009). The second study focused on a smaller group of 283 first-year undergraduate students and examined the degree to which factor scores determined whether or not a freshman student returned for their second year. Using logistic regression, the second study found that the three specific predictors were institutional commitment, academic integration, and academic conscientiousness (Davidson et al., 2009). The two studies demonstrated that the CPQ was a reliable survey tool for identifying predictors or variables of persistence and can facilitate higher education intuitions in understanding which predictors are strong or need to be addressed within their institution.

The CPQ in Research

Since the creation of the CPQ in 2009 by Davidson et al. (2009), it has been adapted into three different versions with all types being used throughout research and at higher education universities (Pugh et al., 2020; Garcia-Ros et al., 2019; Veutero et al., 2020). For example, the CPQ has been used to in Veutero et al., (2020) to identify cultural adaptation in the higher education population, in Pugh et al. (2018) to explore

intention to persist among the nursing student population, and Zamora Menendez et al. (2020) to examine persistence predictors for first year students at a university in Spain. Each version is adapted based on a number of items within the questionnaire or added predictor variables based on the population and location of the study. Davidson et al. (2009) emphasized the importance of adding predictors to the CPQ and adapting it as needed due to each higher education institution and student population being different and having different needs. The main population that the CPQ had been focused on throughout all of these studies is specific first year populations, such as first year students within a specific major or department within a higher education institution, or an entire first year population at a specific institution (Pugh et al., 2020; Zamora Menedez et al., 2020; Veutero et al., 2020).

Military Student Transitions in Higher Education

When speaking about the National Guard population, it is important to understand their position in higher education based on the differences they face in comparison to traditional students, non-traditional students, and other military students. National Guard members are a part-time component of the military, often switching between civilian and military environments. This differs from their active duty peers who are in a military environment continually until their military contract ends. Compared to active duty service members, the National Guard population is typically underrepresented in higher education. Indeed, much of the existing literature on active duty service members in higher education is focused on the impact of active duty transitions to the classrooms, the effects of warzone deployments on the military student, and post-service transitions back to higher education (Ackerman et al. 2009; Baechtold & De Sawal, 2009; DiRamio et al.,

2008; Elliott et al., 2011; Jackson & Sheehan, 2005; Rumann & Hamrick, 2009).

Although this research aids in the understanding of the military undergraduate student, it does not consider concurrent transitions within civilian and military environments a National Guard undergraduate student faces. The lack of research on National Guard undergraduate students led me to include National Guard and undergraduate research in this literature review to better understand and explicate the military undergraduate student. In this review, I explore existing trends in military member persistence through their undergraduate studies along with the limitations and strengths of current research.

Schlossberg Transition Theory

The following sections of the literature review are guided by Schlossberg's (1984) transition theory, a theoretical framework used extensively to understand anticipated and unanticipated self-defined changes in students' routines, relationships, assumptions, and roles as a result of transitions. Schlossberg's (1984) transition theory provides an understanding of adult coping strategies through transitional periods and allows the reader to see the breakdown of current research concerning four sectors or "Four S" (Schlossberg, 2011, p. 160). The Four Ss are found to impact an adult's transitional experience and are categorized into the following sectors: situation, self, support, and strategies (Schlossberg, 2011). The following review examines current literature on military undergraduate persistence through transitions according to its fit within Schlossberg's transition theory to facilitate the organization and conceptualization of the present study overall.

To elucidate the variety of factors influencing a National Guard undergraduate student's ability to persist through their academics, Schlossberg's transition theory was

used for this study due to the fact that there are multiple factors of influence on a person's ability to handle transitions (Goodman et al., 2006). In Schlossberg's transition theory, some individuals navigate transitions with ease or with coping mechanisms based on life experiences while having a hard time navigating transitions based on a variety of responsibilities or events such as health issues, childcare, and professional duties (Goodman et al., 2006) Goodman et al. (2006) identified the following three types of transitions: anticipated, unanticipated, or a nonevent. An anticipated transition occurs when there is an expected outcome, such as an end to the service member's military contract or a college graduation (Goodman et al., 2006; Reburiano, 2019). This differs from an unanticipated transition, such as an emergency deployment or divorce (Goodman et al., 2006; Reburiano, 2019). Lastly, a nonevent is an event that was expected but did not occur, such as having a set deployment end date but not being sent home on that date.

Schlossberg's transition theory has been used in limited research on the military population to identify many different aspects of military member transitions within and outside of higher education (Griffin & Gilbert, 2015). Applying Schlossberg's transition theory, Griffin and Gilbert (2015) used qualitative analysis to explore the barriers and institutional support structures for student veterans. Through the lens of Schlossberg (1984) and colleagues (Anderson et al., 2012; Goodman et al., 2006; Schlossberg et al., 1995), Griffin and Gilbert (2015) found that higher education institutions can better structure and assist military students in developing more effective practices and policies to promote supportive practices throughout transitional periods. Their findings showed that each "S" of the Schlossberg transition theory was created to support a structure that should be studied to serve military students best. Throughout the following sections, the

military undergraduate student will be explored through the lens of each Four S in order to identify what literature currently has concluded on how the military student population persists through transitional periods in and out of the classroom.

Self: The Military Student

As the National Guard undergraduate student transitions in and out of the educational environment, their self-development continues to evolve based on their experiences. Schlossberg (2011) refers to the “self” (p. 158) as the internal communication and strength for coping through a situation and transition. In Goodman et al. (2006), “self” (Schlossberg, 2011, p. 158) is explained as the focus of related internal issues of identity, self-confidence, self-development, self-outlook, self-advocating, values, and autonomy. In the next section, I examine how a military student is influenced by their personal and demographic characteristics throughout a specific transitional period (Goodman et al., 2006).

Barriers and Characteristics

National Guard undergraduate students are unique among their military colleagues based on the unpredictable and continual transitions between civilian and military environments (Bauman, 2009; Molina & Morse, 2017). As a result of the unpredictability of the transitions, and the multitude of transitions occurring at once, National Guard undergraduate students face many barriers to their education, such as confusion in expectations, eligibility services, financial benefits, personal relationships, comfortable environments, and difficulties in navigating their educational experiences throughout the transitional period (Rumann & Hamrick, 2009). This lack of relationship building and continual confusion of procedures can cause the National Guard

undergraduate students to have low self-esteem and self-advocacy, resulting in a lower ability to academically persist while transitioning between military and civilian environments (Rumann & Hamrick, 2009).

A significant majority of military undergraduate students are members from underserved populations: first-generation college students, nontraditional students, those from lower socio-economic statuses, and/or people of color (Jenner, 2019). Despite underserved populations not having the same educational opportunities, tools, and mentors, military undergraduate students develop their educational tools to persist through their academics and cultivate a sense of identity through experiences from their civilian and military environments (Bauman, 2009; Jenner, 2019). The structured setting and military rigor, along with their civilian experiences, have promoted certain attributes such as leadership, responsibility, independence, a high rate of in-class participation, and critical thinking as factors that contribute to the higher education environment for military undergraduate students (Bauman, 2009; Thompson, 2011). These attributes were formed from both their civilian and military environments contributing to the overall growth of the military undergraduate students and providing a strong foundation for success (Bauman, 2009 & Thompson, 2011).

Blaauw-Hara (2016) found that military undergraduate students bring many positive character qualities to the higher education environment from their military service. Drawing from the military environment and customs, military students utilize the skills taught from their military experiences and training within the higher education classroom environment (Aikins et al., 2015; Barry et al., 2012; Elliott et al. 2011; Niv & Beennett, 2017; Pelts & Albright, 2015). As a result, military students invest in the

military ideology of ensuring mission completion regardless of the difficulties or challenges presented (Blaauw-Hara, 2016). Their hyper-focus on challenge completion has molded their self-outlook within the academic environment to be very driven and resilient as challenges are presented (ibid.).

In addition, military students tend to be culturally aware, given their travel and experiences while being deployed. Blaauw-Hara (2016) found that military students' enriched understanding of other cultures allow them to be more interested in their coursework and open to diversity. Contrarily, Wheeler (2012) found that the older the military student, the more removed from the classroom and less likely they are to apply their experience and acclimate to the educational environment. In turn, the difference in age group creates a disparity of investment and persistence in coursework that may be dependent on many factors, such as the length of time away from the classroom or whether there are competing responsibilities that take priority. These varying factors can be a problem due to National Guard undergraduate students being diverse in age, race, and life situations (Molina & Morse, 2017). Drawing from the diverse population pool, the National Guard undergraduate student may not resemble a typical undergraduate student, and this inability to associate with their peers can negatively impact their ability to self-identify as a higher education student (Molina & Morse, 2017). The lack of self-identity for a National Guard student can lead to the inability to stay enrolled and persist through transitional periods between academic and military environments (Molina & Morse, 2017).

Post-Activation Impact on Self

Throughout deployments, military students may be subjected to experiences that cause trauma. Depending on the branch of service, typical deployments can last 6–12 months, meaning these military students are exposed to and witness traumatic events such as death, natural disasters, vehicle accidents, sexual assaults, and life-threatening experiences for extended periods of time during each deployment (Morrison-Beedy & Rossiter, 2018; U.S. Department of Veteran Affairs, 2018). As a result, mental health issues can develop, with two examples being post-traumatic stress disorder (PTSD) and Military Sexual Trauma (Morrison-Beedy & Rossiter, 2018; U.S. Department of Veteran Affairs, 2018; Jenner, 2019). Symptoms of these mental health issues include chronic pain, sleep issues, anger, anxiety, depression, substance abuse, grief, and suicidal thoughts (U.S. Department of Veteran Affairs, 2018). For military members, this trauma can be felt both in and outside of the military environment and can impact a military student's self-outlook, self-confidence, and self-development (U.S. Department of Veteran Affairs, 2018).

PTSD is a pervasive problem for veterans, impacting their ability to persist through daily tasks due to loss of sleep and anxiety (U.S. Department of Veteran Affairs, 2018). Eleven to 20% of veterans of Military Operations Iraqi Freedom and Enduring Freedom, ending in 2011 and 2014, have PTSD (U.S. Department of Veteran Affairs, 2018). Kline et al. (2010) found that New Jersey National Guard deployed to Afghanistan and Iraq and their PTSD rates reflected like that of the rest of the general military population. National Guard members are subjected to similar environments as service members, but these citizen-soldiers are thrust into military environments and then quickly

have to transition back into civilian life, including returning to their education (Rumann & Hamrick, 2010). When looking at the veterans' crisis line, a service for current and former military members seeking immediate mental health assistance, from January–November 2020, there was a minimum of 10,000 more veteran crisis calls each month than in 2019 (Ramgopal et al., 2021). This dramatic increase emphasizes the need to investigate the National Guard undergraduate student, considering the multiple different transitions they faced during the pandemic, and the impact it may have on these students' ability to persist through their coursework.

Situation

The “situation” concept of Schlossberg's (2011) transition theory refers to the location of the transition and the person's situation at the time of transition. Based on life circumstances at the time of transition, the decisions made during the transitional period may be situational and may not have been decided upon in the same manner if the transition occurred at a different time (Schlossberg, 2011). Goodman et al. (2006) explained that the following transition areas are included within the situation Four S: control, role changes, duration, concurrent stress, assessment, triggers, and timing. Provided the multiple transitions occurring throughout the health crisis, the “situation” of the student is imperative to conceptualize.

Transitional Issues

Gilbert and Griffin's (2015) work focused on the second of Schlossberg's Four Ss, situation. The researcher's findings suggested that military students seek consistent and controlled communication pathways during transitions (Gilbert and Griffin, 2005). Despite Gilbert and Griffin (2015) identifying the need for communication services for

the military student population, barriers still exist to appropriate communication channels and cause military students to lack motivation in re-entering the academic environment or negatively impact their ability to persist through their coursework (DiRamio et al., 2008). The complexity of the higher education environment in regards to financial concerns, challenges with the process of military educational funding benefits, and allocation of transfer credits can make transitioning difficult for students (Anderson et al., 2012; DiRamio et al., 2008; Gilbert & Griffin, 2015; Moon & Schma, 2011). An inadequate communication system between the military undergraduate student population and the higher education institution can be an additional stressor that traditional students may not face (Gilbert & Griffin, 2015). By higher education institutions investing in creating proactive solutions to better support more available and informed communication pathways, it can assist in mitigating any additional stressors impacting a military undergraduate student's ability to persist through their academics.

With the increase of U.S. troops' involvement in conflicts around the world, it is essential to transition the troops back to the collegiate environment with an understanding of their strengths, challenges, and the possibility of acquired trauma. DiRamio et al. (2008) explored student veteran assistance programs nationwide and concluded there was a lack of comprehensive and holistic systems for military student populations throughout their transitions from active duty to the collegiate environment. Drawing from the DiRamio et al.'s (2008) conclusion on the lack of holistic systems for military members, the absence of support systems leaves military members unable to identify healthy ways of coping through transitions and further creates a fracture within the self-section of the

Schlossberg's transition theory by not taking action to dismantle a barrier that leads to a high rate of military members unable to transition and persist through their academics.

As researchers continued to assert that higher education transitional support is needed for military undergraduate students, DiRamio et al. (2008) suggested higher education institutions task faculty, staff, and administrators to create inter-departmental identification programs to assist in making information and access between the higher education institution and military students less restrictive. Higher education institutions who create an institution-identification method will ensure detection is not limited but rather supported to ease the burden of collection and focus on support and communication for the institution-student relationship (DiRamio et al., 2008). Adding to this notion of identification, Blaauw-Hara (2016) proposed higher education institutions giving student manuals that laid out the procedures for obtaining help and facilitating each campus's administrative departments. Provided the continual activations and transitions for the military undergraduate student population, having a guided administrative procedure on campus policies is vital to ensure that the military undergraduate student is in understanding of the different avenues of how to obtain resources and up to date information upon their transition back to the academic environment (DiRamio et al., 2008). Higher education institutions must realize military students are only increasing in population size and consider adaptations to current practices to suitably serve this population through and between transitional periods (Blaauw-Hara, 2016; DiRamio et al., 2008).

Support

As a result of military students consistently transitioning, it is imperative for their educational success that they have support systems throughout the transitional period. The “support” section of Schlossberg’s transition theory focuses on the support system used or available for an adult at the time of a transition and its importance on an adult’s wellbeing (Schlossberg, 2011). Goodman et al. (2006) explained the following transition areas are included within the support section: intimate relationships, family units, networks of friends, and relationships with institutions or the community. These relationships are part of a military student’s life and can be impacted through the various transitions that the COVID-19 health crisis presented for these students.

Institutional Connections and Supports

The military experience has provided military members with many strengths that research has shown to facilitate transitions. Blaauw-Hara (2016) noted strengths, such as openness to outside cultures and new experiences, were foundational attributes that lead military students to want to connect to the larger school community. Despite having these strengths, many military undergraduate students find it hard to connect to other students (Blaauw-Hara, 2016; Gilbert & Griffin, 2015, Livingston et al., 2011). The inability to connect between military to nonmilitary undergraduate student connection caused military students to face various feelings about their military status and overall participation in higher education (Gilbert & Griffin, 2015). The lack of connection not only affected relationships between military students and their nonmilitary peers, but also transferred over to negatively impact their ability to connect to faculty and staff at the higher education institutions (Blaaw-hara, 2016; Gilbert & Griffin, 2015).

In DiRamio et al. (2008), military undergraduate students reported experiencing negative feelings and antimilitary bias from their higher education institutions, with a percentage of the population experienced bias from professors. Even with negative experiences on campuses, Blaauw-Hara (2016) found military students use their resiliency to seek the same social environment they had throughout the military. The sense of comradery and structured environment of the military creates social connections that are hard to replicate within an open higher education environment (Blaauw-Hara, 2016). Due to the differences in social environments, Blaauw-Hara (2016) found military students strive to make connections and look for teachers, staff members, or groups that fulfill that need throughout their transition to higher education. In order to make the connections, military undergraduate students attempt to strengthen their involvement with specific professors who act as mentors, faculty and staff who welcome extra time for military students to converse and ask questions, and seek to attend military student clubs to find friends who have relatable experiences (Blaauw-Hara, 2016).

As military members transition between civilian and military environments, they seek peers and faculty who are relatable through military undergraduate student organizations and nontraditional student groups (Blaauw- Hara, 2016, Gilbert & Griffin, 2015; Livingston et al., 2011). As a result, higher education institutions are tasked with creating environments that cater to that need. Evidence indicates that the transition in social contexts from the military to the higher education environment is one of the main challenges military students face to degree attainment (Jenner, 2019). Jenner (2019) strongly suggested providing ways for military students to connect in and outside of the classroom as crucial to their educational success throughout of transitional periods. For

example, the higher education institution investing in co-identity organizations, such as creating military student organizations or having a mentor that can relate to military students deployed experiences may be beneficial in aiding persistence (Jenner, 2019). These suggestions are important, as researchers (Beedy & Rossiter, 2018; Gilbert and Griffin, 2015; Williams-Klotz & Gansemer-Topf, 2017) found having a military liaison, and one who was knowledgeable in both higher education practice and the military environment was of great benefit, particularly in an administrative, faculty role to ensure that military students have a guide to facilitate with their transitional process. The liaison acts as both a confidant for the military student and a neutralizer to other barriers to the persistence of the student (Williams-Klotz & Gansemer-Topf, 2018).

Strategies

The strategies section, the last section of Schlossberg's (2011) transition theory Four S system, explores the various roles people play in managing their behaviors. The variables of behavior management are based on the following three categories: variables that modify the issue or situation, variables that control the meaning of the issue, and the variables that aid in managing stress post the situation occurring. Goodman et al. (2006) emphasized using coping mechanisms to stabilize or modify those variables to ensure individual flexibility is provided as a strategy to combat issues, such as, related to this Four S section. The following literature is my exploration of the research connected to variables and facilitation of coping strategies related to the strategy.

Assistance

Military undergraduate students arrive to campus with higher education intuitions recognizing that this subgroup of nontraditional students view the higher education

environment with a multi-layered lens unique to their military experience (Gilbert & Griffin, 2015; Livingston et al., 2011; McBain et al., 2012). For the military undergraduate population, the need for control of information and stress management is crucial to their academic success and was noted on Federal Executive Order No. 13,607 (2012), which supplemented the educational information given to military students, such as a requirement for a higher education contact for financial services and enrollment and mandatory reinstatement after temporary military service (Gilbert & Griffin, 2015). In conjunction with the identification and need of program implementation, DiRamio et al. (2008) provided suggestions on specific programs that higher education institutions should consider implementing to ease transitions. It is through the assistance programs that facilitate in military undergraduate students obtaining the knowledge needed to make strategic decisions (DiRamio et al., 2008). For example, Federal Executive Order No. 13,607 (2012) requirement is a financial aid assist that ensures military undergraduate students have information on correct resources to decide how to appropriately use their funding resources from the military and higher education institution.

Military students who are navigating the higher education environment can do so with correct information and points of contacts that allow them to make independent, strategic decisions in the areas such as funding, academic programs, and mental health. However, a barrier in the transitional process was fostered when there was an encounter with a faculty member, educational leader, or advisor that lacked the correct information or was impolite (Gilbert & Griffin, 2015; Wheeler, 2012). The barrier created by a lack of accurate information emphasizes the importance of research that shows that there is a need for training faculty and staff members on the needs and concerns of military

undergraduate students (Wheeler, 2012). When staff and faculty are trained, military undergraduate students have less barriers and can be more independent on campus, because faculty and staff are more understanding and can better assist military students with their questions or concerns (Gilbert & Griffin, 2015; Wheeler, 2012).

Conclusion

In all, the National Guard undergraduate student population is a unique subgroup of nontraditional students that is in need of further exploration to best identify support programs and communication pathways that facilitate persistence through transitions (Burger, 2000; Ackerman & DiRamio, 2009). National Guard undergraduate students face a number of difficulties on their way towards obtaining an undergraduate degree that other military students, nontraditional students, and traditional students may not face. The continual transitions while serving their contract interrupt a National Guard undergraduate student's life in civilian, academic, and military environments (Rumann & Hamrick, 2009). While these transitions are occurring, the National Guard undergraduate student is attempting to navigate their higher education while having inadequate communication systems, inadequate military student identification systems, lack of resources for building relationships on campus, lack of supports for their transitional period, and an overall lack of understanding of a military undergraduate student (Blaauw-Hara, 2016; DiRamio et al., 2008 Gilbert & Griffin, 2015; Goodman et al., 2006). The deficiency of supports on higher education campuses and the generalization of the nontraditional student contribute to barriers stifling persistence.

When viewing the research through Schlossberg's transitions theory (1995, 2011), it is promising that the military undergraduate population has been explored regarding the

four adult coping sectors, or Four Ss. Although each section has research exploring the overall theme of the Four Ss, there continues to be a lack of investigation regarding how the National Guard undergraduate student copes through the multiple different transitions. Regarding coping through transitions for the National Guard undergraduate student, each Four S stands alone with little understanding of connections between the four sectors. By not having a full understanding of how the Four Ss connect to support persistence, National Guard undergraduate students continue to be misunderstood by faculty and higher education institutions. This misunderstanding further creates fractures within the overall mission of academic success throughout the multiple transitional periods the National Guard undergraduate student faces.

Chapter 3

Methodology

The purpose of this mixed-methods, explanatory sequential design study is to identify how and why NJAANG undergraduate students persisted through their coursework while serving during the COVID-19 health crisis in order to better understand and assist the NJAANG undergraduate students through multiple transitions. The NJAANG undergraduate student population differs from the military's active duty and reserve components due to the state-oriented missions and varied, unpredictable transitions that occur for an NJAANG student. This study's participants are current and former NJAANG members who were undergraduate students at New Jersey higher education institutions throughout the health crisis activation and service period including and through the spring 2020-2021 semesters. The study methods included a survey to identify eligible participants and gather descriptive data, such as demographics, credit higher education institution, and length of military service. After collecting data from the surveys, participants volunteered to participate in interviews that would investigate in depth the transitions experienced by students, their transition behaviors, and the connection to persistence

In this study, using the explanatory sequential mixed method design, data is initially gathered in the quantitative phase through a survey instrument exploring academic persistence throughout the health crisis. Upon conclusion of the survey, the results were analyzed and shaped the second, qualitative interview phase. Throughout the qualitative phase, participants were interviewed using a protocol shaped by Schlossberg transition theory to determine how persistence was or was not supported based on the

four determining sections of support within the theory. Schlossberg's transition theory (1981, 1984) provides four sectors, referred to as the 'four Ss,' that will provide the theoretical basis for persistence through a transition (Patton et al., 2016) as conceptualized in this study. By viewing the 'four S's' of NJAANG undergraduate students using a mixed-method, explanatory sequential design, and recommendations emerged as to how to support these students and their persistence during transition. By combining the data from the quantitative survey instrument and qualitative interview, it allowed the research to best understand how NJAANG undergraduate students persisted and why persistence was or was not supported throughout the multiple transitions of the health crisis

The following are the research questions for the study:

1. To what extent do NJAANG undergraduate students who were activated for COVID-19 persist within the higher education system?
 - a. Does the persistence differ based on race/ethnicity, gender, socioeconomic status, or age?
2. How do NJAANG undergraduate students describe the timing of the health crisis on their coursework? (Situation)
3. What values do NJAANG undergraduate students describe as having the most influence on their ability to persist through their coursework during the health crisis? (Self)

4. What higher education institution social supports did NJAANG undergraduate students report experiencing that aided in their ability to persist through the health crisis? (Support)
5. How did NJANG undergraduate students use coping mechanisms to persist through their coursework during the health crisis? (Strategies)

The Assumptions of and Rationale of Mixed Methods Research

A sequential, mixed methods research approach was chosen for this study in a way that allowed the quantitative survey instrument to identify and gather data to then shape the qualitative interview protocol from which data were further collected and subsequently combined to portray an understanding of a complex social phenomenon (Creswell & Plano Clark, 2018; Ivankova & Stick, 2007). By having both quantitative and qualitative approaches, it allows the researcher to replace weaknesses from one approach with a strength from another (Creswell & Plano Clark, 2018). In turn, the combination of the approaches provided a complete system for data collection and analysis, by lessening the limitations of both approaches (Creswell & Plano Clark, 2018; Ivankova & Stick, 2007). Creswell & Plano Clark (2018) note that key characteristics of mixed methods research includes the implementation of both qualitative and quantitative research methods within the study, mixing both qualitative and quantitative research at some point throughout the study, and that the studies procedures are framed by a specific theory (Creswell & Plano Clark, 2018).

A main strength of mixed methods research is the ability to combine the numeric, quantitative data analysis with the qualitative, interview data analysis (Creswell & Plano Clark, 2018; Ivankov et al., 2006). The quantitative data analysis for this study was

appropriate, because this methodology sought to understand how NJAANG students persisted through the COVID-19 health crisis (Creswell & Plano Clark, 2018). Equally significant, the qualitative data analysis is needed to better understand why the NJAANG population academically persisted through the COVID-19 health crisis (or why they did not) and the various perspectives and transitional experiences of each individual. Provided the importance of applying both forms of methodologies, only using one would lack sufficient understanding of how NJAANG persisted through their coursework given the multitude of transitions (Creswell & Plano Clark, 2018).

In addition, a mixed methods approach was appropriate because it allows for further investigation of the initial data collection and analysis within the first phase of the study by being able to follow-up with a second phase of collection and analysis (Morgan, 1998; Tashakkori & Teddlie, 1998). This ability to follow-up with the initial data analysis within the first phase of the study is important given the ability mixed methods research has in explaining significant, non-significant, surprising, and outlier results (Morse, 1991). The combination of the data analysis by both the quantitative and qualitative phases of mixed methods research provides a better understanding of trends in persistence of undergraduate coursework through the transitions of the COVID-19 health crisis within the NJAANG population (Creswell & Plano Clark, 2018).

The NJAANG population is complex given their continual and unpredictable transitions between military, civilian, and academic environments. The complexity is best addressed by a mixed methods approach that is designed to understand and capture how the whole social phenomenon is occurring (Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 2010). This study used variables targeting persistence and transitions, addressed

in a quantitative survey instrument, and a qualitative interview strategy that elicited NJAANG student voice and viewed through Schlossberg's transition theory. This allowed the research to have a well-rounded understanding of academic persistence through the multiple transitions of the COVID-19 health crisis. Additionally, this allowed for the identification of other important variables such as NJAANG student characteristics, institutional attributes, and the individual military activation experiences of NJAANG undergraduate students that may influence student persistent and transitions.

The Challenges of Mixed Methods Research

Despite mixed methods research having many benefits, there are challenges that mixed methods researchers must weigh. A difficulty for mixed methods researchers is ensuring that there is a foundational understanding, and ability to employ, both qualitative and quantitative research methods (Creswell & Plano Clark, 2018). The pairing and integration of qualitative and quantitative research methods require an in-depth understanding of data collection and analysis unique to their own designs (Creswell & Plano Clark, 2018). When using mixed methods research, if there is an imbalance of understanding between quantitative and qualitative methods, then integrating the two methods without error can be challenging (Creswell & Plano Clark, 2018).

Another challenge to mixed methods is the ability to have the time and resources that mixed methods research entails (Creswell & Plano Clark, 2018). A researcher who is undertaking a mixed methods study takes into account the time and resources needed for data collection, analysis, and study approval (Creswell & Plano Clark, 2018). Since there are two methods of research, there is a longer timeline than a one-method research design because there may be multiple phases of the study. Dependent on the study, a researcher

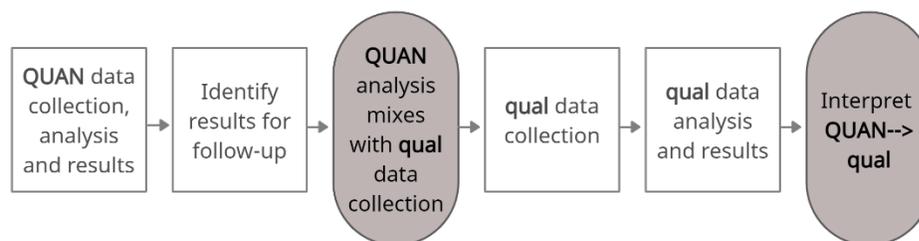
may look to a two-phase, multi-phase, or one phase mixed methods approach that all will entail different timelines (Creswell & Plano Clark, 2018).

Research Design

The specific design I identified for this study was the follow-up approach of the mixed methods explanatory sequential design. When deciding between the various approaches of mixed methods, a researcher must consider if there should be weight distributed to either the quantitative or qualitative data collection, analysis, or overall phases of the study (Ivankova et al., 2006). The explanatory design naturally provides more weight to the quantitative phase due to the sequential nature of the design starting with quantitative and ending with qualitative data collection and analysis (Ivankova et al., 2006). Since NJAANG undergraduate students are very complex, having a quantitative approach at the start allows this study to best identify trends in transitional persistence to then be naturally elaborated upon within the qualitative phase.

Figure 1

Follow-Up Explanatory Design (Edmonds & Kennedy, 2019)



The structure of the explanatory sequential design, as shown in Figure 1, is straightforward because of how the quantitative and qualitative methods are conducted in separate phases (Edmonds & Kennedy, 2019). By having two separate phases the study was conducted by one researcher that collected data in a designated sequence (Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2019). Mixed methods researchers who use this design tend to view each phase through a different philosophical position and are encouraged to do so by Creswell & Plano Clark (2018) in order to see complex issues through a variety of perspectives. Explanatory sequential researchers typically move from a post-positivist philosophy, which is a world view centered around detailed observations, reductionism, determinism, and continually refining theory, in the quantitative phase to a constructivist worldview, which takes a different approach by looking at a meaning of a phenomena through participates view and understanding means in the qualitative research to follow the two-phase structure of the mixed methods design (Creswell & Plano Clark, 2018). Understanding the importance of a worldview for mixed methods research is important, because the outlook or worldview on the study can inform the practices of procedures for the mixed methods research (Creswell & Plano Clark, 2018). This research design is constructed to assist in a sequential nature that is strong in the quantitative phase followed by a complementary qualitative phase that assists in explorations of trends found in the earlier phase (Creswell & Plano Clark, 2018).

Given the importance of quantitative data collection and analysis, the qualitative phase is formulated around results of the quantitative phase, and as a result, cannot be fully constructed until after the quantitative phase is complete. Despite the challenge of not being able to fully formulate the qualitative phase until the quantitative data analysis

is fully concluded, the follow-up explanatory design allows for the information found in the quantitative phase to be expanded upon (Creswell, 2006; Creswell & Plano Clark, 2018; Edmonds & Kennedy, 2019). Creswell & Plano Clark (2018) explain that intent of the explanatory design is to use the qualitative phase as a means of explanation for the initial quantitative data analysis. The follow-up variant of the explanatory design facilitates the explanation within the qualitative phase by placing priority on the quantitative data analysis and providing the qualitative phase with a substantial amount of quantitative data analysis that shapes the qualitative instrument with the aim to further explore and understand the initial quantitative data analysis (Creswell & Plano Clark, 2013).

Context and Participants

As mentioned in Chapter One, the NJAANG population has almost 8500 members eligible for an in-state undergraduate degree at 30 institutions in the State of New Jersey (NJ Army Guard, n.d; Walters, 2006). NJAANG members who enroll at a higher education institution face the challenge of taking classes while taking on other duties within their military and civilian environments. When COVID-19 appeared within the United States, NJAANG members who were enrolled in an undergraduate program were forced to transition within each environment, while attempting to persist through their coursework.

In a 2015-2016 study, of the 19, 532, 300 undergraduate military students nationwide 29,200 were National Guard students (Holian & Adam, 2020). This population comprised .2 percent of the undergraduate military population (Holian & Adam, 2020). Despite being a small population amongst their military peers, National

Guard members are found to be the highest percentage of military students at public four-year institutions and come second in highest military population by only three percentage points at public two year universities (Molina & Morse, 2015). By identifying the significance of the National Guard population at public institutions, it was crucial to look at how this population was persisting through their unpredictable transitions. When COVID-19 appeared in the U.S. in 2020, the NJAANG was one of the first states to deploy their National Guard in a Joint Mission status. Rather than considering national trends, the study was limited to considering persistence through a mixed methods explanatory sequential approach within a particular context, New Jersey, in order to capture a deeper understanding of the multi-dimensional transitions on the academic persistence endured by this population. Persistence, for the study, is defined as a NJAANG student completing all or some of their courses throughout the health crisis. Additionally, withdrawal is defined as a student fully stopping and not returning to their higher education courses.

Sampling

The military student assimilation culture to the general undergraduate or non-traditional student population, along with the heightened privacy of military activations statuses, makes this population ‘hidden.’ A hidden population is considered to be a group or category of people who have a heightened need for privacy and of which there are no existing or known sample frames (Heckathorn, 2011). Heckathorn (2011) surmised that in order for a sample frame to not be feasible for construction the following items must be present: 1) the studied population is a smaller part of the general population and attempting to identify these individuals would be costly; 2) the studied population is

within social networks that are difficult for researchers to have access to and may require personal contacts; and 3) the studied population is stigmatized and may require the researcher to develop trust in order to gain contact with members of the population. The National Guard undergraduate population fits all three components to be considered hidden as the NJAANG is a smaller set of the military and general population, it is hard to be in contact and build trust with military members due to their security clearances and the culture surrounding an importance on confidentiality (Spurlin & Garven, 2016). As mentioned above, the National Guard undergraduate population nationwide comprises only .2% of the military student population, and with the focus of the COVID-19 health crisis this further narrows the population available for the study. Despite being a part-time service, the National Guard is still a military branch and participants are subjected to institutionalized and vulnerable population research requirements in which there is protection from undue influence, a requirement of command approval, and a minimum age requirement of researched participants being a minimum of 18 years old (Spurlin & Garven, 2016). The NJAANG population is a very small population of the undergraduate and military undergraduate student population that is hard to identify given a narrowed focus on the state of New Jersey and the COVID-19 health crisis, and the population is subjected to heightened research protections and will require trust and internal contacts from the Department of Defense (Spurlin & Garven, 2016).

Being that the NJAANG is a hidden population, and a sample frame is unknown, the sampling strategy for this study is response driven sampling (RDS). This sampling method uses a mathematical model of social network recruitment, to access hidden populations by using a primary group of respondents as seeds who act as recruiters within

their social networks to create a continued wave of survey participants (Heckathorn, 2011; Johnston & Sabin, 2010). This group of “seeds” is not recruited randomly, but is diverse, has a deep social network within the targeted population studied, and should be rather easily accessible to the researcher (Heckathorn, 2011; Johnston & Sabin, 2010). RDS is best appropriate for populations that utilize social networking, can identify seeds that can penetrate the social network with the recruiting chain with at least 2-5 peers each, and has multiple social network or sub-social network components (Johnston & Sabin, 2010). For this study, the NJAANG population has multiple subgroups based on branch of service between the army and air components and even further subgroups of base and unit assignment. The military works in networks based on activation locations, base assignment, unit assignments, and joint-service operations where both the Army and Air National Guard’s network and work together. Lastly, I have access to the participants due to being a veteran of the New Jersey Air National Guard and will have some access to ensure that the ‘seeds’ meet the following criteria: all seeds are members of the New Jersey Air National Guard, all seeds were or are undergraduate students enrolled at a New Jersey institution, all seeds have a substantial social network to sustain RDS, and all seeds were part of my social network prior to the study (Hackathorn, 2011).

Throughout the recruitment process, coupons or tokens are given to each ‘seed’ as a way to recruit peers. For this study, there will be a fixed coupon quota of three peers to ensure that there is no pressure or intimidation pattern happening within the military structure. The coupons are necessary, not only as a recruitment incentive, but as a way to track how each participant is connected to the study, a way to enroll the recruited participant, an avenue for receipt for the ‘seed’, and a logistical tool to inform the

recruited participant how to get in contact with the researcher and the possible survey distribution locations (Johnston & Sabin, 2010). For this study, I provided coupons that will enroll each participant into a raffle. Instead of instant reward, such as money, a raffle will ensure that there is equitable winnings and avoid the issue of rank or authoritative intimidation.

In order to employ RDS, a researcher must operate under five assumptions, with the first three conditions determining if RDS is an appropriate method (Hackathorn, 2011). The first and second assumptions are that study participants must know each other as members of the studied population and the ties must be well enough to ensure the sustainability of the chain-referral methods (Hackathorn, 2011). Third, sampling should be foreseen to occur with a replacement to ensure that the recruited participants are not depleting the set of available respondents and halt the recruitment process (Hackathorn, 2011). Fourth, respondents need to be able to report the number of their network. Lastly, the fifth assumption is that the respondent's recruitment is random within their network pool to ensure that there is no weight given only one grouping of the studied population (Hackathorn, 2011).

Additionally, I used a second method of sampling to address any students who were missed by RDS by employing purposive sampling. Purposive sampling is the intentional selection or recruitment by researchers for participants on the issue or phenomenon studied (Creswell & Plano Clark, 2018). As the researcher, I reached out to the director of the military student offices across the New Jersey State Higher Education system, and provided a flyer that targeted NJAANG students who fit the needs of the

study. Since I was unable to get direct contact, the director of the military student offices emailed their students and provided them with the code to the CPQ.

Within the quantitative phase of the study, a legitimation issue can rise in regards to sample size and whether or not the number of responses was collected in order to generalize the study's findings (Allen, 2017; Benge et al., 2007; Creswell & Plano Clark, 2018). To ensure the legitimation and the ability to generalize the study's findings, I ran a logistic regression power analysis before and after data collection. A power analysis allows a researcher to identify the number of participant responses needed in their sample size in order to generalize the study's findings (Allen, 2017). A power analysis can be run before and after data collections with terms a priori and post hoc used to describe the two periods of power analysis (Allen, 2017). For my a prior power analysis, the following information was used within the power formula when inputted into the G*Power software: test family; Z test, odds ratio; 2, Pr (Y=1|X=1) H0; 0.2, a err prob; 0.8, R² other x; 0, x distribution; normal, x parm u; 0, and x parm o; 1. The output of this power analysis resulted in a total sample size of 113 participants. In turn, I used the power analysis total participant number as a guide to ensure analysis generalizability and as a minimum target for participant response total (Allen, 2017).

Qualitative Sampling

For the qualitative phase, I used maximum variation sampling, a specific strategy of purposeful sampling, given the emphasis on choosing diverse individuals that have different perspectives on the phenomenon studied (Creswell & Plano Clark, 2018). The diversity can be based on age, race, school, location, or other various factors that differentiate participants and provide different perspectives and differences in order to

conceptualize the entirety of the factors of influence on the central issue of the study (Creswell & Plano-Clark, 2018).

Maximum variation sampling, also known as heterogeneous sampling, was chosen for this study based on the diversity of the military population and ensuring a well-rounded sample (Creswell & Plano Clark, 2018). Participants were respondents who contributed in quantitative data collection and were chosen based off of a difference of activation location, length of orders, sex, socioeconomic status, and race/ethnicity. The decisions were made to best formulate a diverse pool of individuals to interview and conceptualize the overall issues in transitional persistence for the NJAANG population. By having the ability to pick the different respondents, it ensured that there were differences in every interviewee and varying perspectives are heard to best understand how and why the NJAANG members persisted through their coursework throughout a multi-transitional period (Creswell & Plano Clark, 2018).

Data saturation for the qualitative phase was met when interviews were continually yielding the same or similar codes or information. When data are rich and deep, it allows the researcher to see themes or patterns throughout the analysis (Fusch & Nesh, 2015). Despite research not typically having a one-size fits all outlook for saturation, when there is a lack of new codes, themes, or ability to replicate the research it is often thought of as reaching and fulfilling data saturation (Fusch & Nesh, 2015).

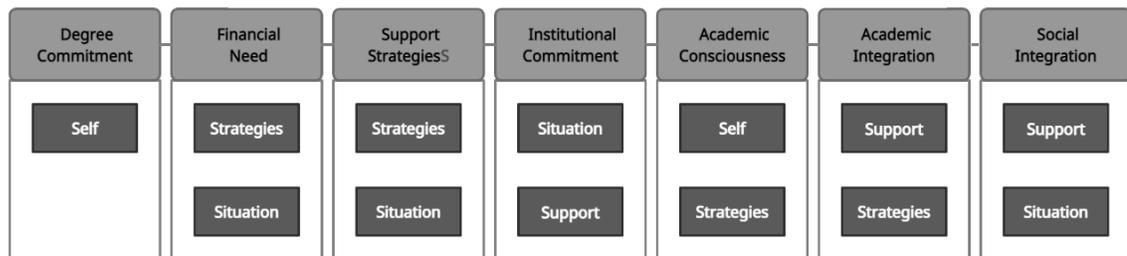
Variables

The variables picked for this study were pulled from the CPQ, literature, and Schlossberg's transition theory. When originally administered, the CPQ provided six variables shown to be important for persistence within the collegiate undergraduate

community. The following the six predictor variables were found to have a strong correlation to persistence within the CPQ: Adaptations to schoolwork: institutional commitment, degree commitment, academic integration, social integration, support services satisfaction, and academic conscientiousness. Financial need, one of the predictor variables I chose was included within the CPQ, but was not one of the six strongest predictor variables from the original study. Extensive research shows that military members join the armed forces for educational benefits and supplemental income (Eighmey, 2006; Gorman & Thomas, 1991; Ginexi et al., 1994; Hall, 2010; Woodruff et al., 2006). Drawing from the research, it was crucial to include the financial need predictor variable and CPQ components used for this study.

Figure 2

The Connection Between the CPQ Predictor Variables and Schlossberg's Four S



All seven predictor variables pulled from the CPQ, also relate to Schlossberg's transition theory's Four Ss as the variables are components that Schlossberg found to impact adult transitional persistence (Schlossberg, 1984). For example, the financial need and support services variables relate to the situation and strategy Four S due to how a change in finances and support options can impact a military members decisions

throughout the transition by altering the circumstances of the situation and strategy on how to cope throughout the transitions. The academic consciousness and degree commitment variables relate to the self Four S based on both relating to intrinsic motivation and commitment which can alter a military member's ability to cope through a transition. Social situation relates to support Four S because it ties back to relationships and the ability to make connections on campus in order to cope through transitions. Lastly, institutional commitment relates back to the situation and strategy four S based on how the institution invests their decision making and supports to the National Guard population. Based on the level of institutional commitment, a National Guard undergraduate student may adapt their coping mechanisms along with making decisions based on the lack of investment impacting the transition.

Additionally, some of the descriptive variables aided in understanding patterns throughout the data analysis. The predictor variables that related to undergraduate transitional persistence were the following:

1. *Race/Ethnicity* (Categorical): When responding to the ethnicity category, students were able to pick from the following options: Asian, African American, American Indian/Native American, Hispanic or Latinx, Native Islander, White Non-Hispanic, or unreported.
2. *Age* (Interval/ratio): The respondent will reply with their age at the time of the study.
3. *Gender* (Categorical): When responding to the gender category, students were able to pick from the following gender category: female, male, non-binary, or no preference.

4. *Socioeconomic Status (Categorical)*: The respondent will reply with their mother's education level starting from the following options: less than high school, high school graduate/GED, some college, technical school/college, 2 year degree, 4 year degree, professional degree/doctorate, or I prefer to not disclose.
5. *Accommodations (Categorical)*: Student adaptations were broken down into the following categories: extra time on assessments; assignments deadlines were extended, change in school procedure; in-class to online schoolwork, added assistance; one-on-one tutoring or meeting with professors, and an assigned note taker.
6. *Institutional Commitment (Ordinal)*: Higher education institution commitment broken down into the following categories: high sense of commitment to their specific university, committed to their specific university, or not committed to their specific university
7. *Degree Commitment (Ordinal)*: Degree commitment broken down into the following categories: strong commitment, committed, or not very committed.
8. *Academic Integration (Ordinal)*: Student academic satisfaction broken down into the following categories: satisfaction with level of faculty, a satisfactory level of connection to learning, and a satisfactory level of interest in their degree.
9. *Academic Conscientiousness (Ordinal)*: Students motivation to attend class and submit classwork broken down into the following categories: never motivated, sometimes motivated, motivated, and very motivated.
10. *Social Integration (Categorical)*: Relationships that are broken down into the following categories: student who have interpersonal relationships with

classmates, students who have relationships with faculty, or students who have an overall connection to the university.

11. *Support Services Satisfaction (Categorical)*: Higher education support broken down into the following categories: communication support, student-input, or student needs.

12. *Financial Need (Ordinal)*: Financial need is broken down into the following categories: low financial need, some financial need, and high financial need.

Quantitative Data Collection

The first step of the explanatory mixed method design is the quantitative data collection section of the study (Creswell & Plano Clark, 2018). As mentioned, the quantitative data will be collected through a survey method in which participants were recruited through respondent driven and purposive sampling. A survey was chosen as the data collection instrument given the exposure surveys have in society and the importance that has been placed on them for everyday citizens to contribute and have their say in policy development (Rea & Parker, 2005). NJAANG members are consistently transitioning between environments, and having an instrument that collects data on a platform they are used to, limits confusion and error. In addition to familiarity with survey tools, another advantage of survey research is that the survey instrument is time conscious, where data can be collected in a shorter amount of time and does not put much of a burden on the researcher and respondent (Rea & Parker, 2005). By having a data collection method that is not time consuming, the NJAANG member can manageably complete the survey in comparison to other data collection methods (Rea & Parker, 2005). Lastly, survey research and use has a wide range of acceptance and credibility at

academic institutions as a research method, instrument, and technique (Rea & Parker, 2005.)

The CPQ, the survey instrument chosen for this study, is self-administered and does not require the presence of the interviewer and researcher (Saris & Gallhofer, 2014; William et al., 2009). The mode of presentation for the CPQ is visual and was conducted on screened technology such as a computer, tablet, or mobile device (Saris & Gallhofer, 2014). Provided that the CPQ is a web-based survey, this method was chosen given the freedom to access where and how is most comfortable for the respondent. There are many advantages to the web-based survey, such as convenience in access to technology and the lack of need for transportation, rapid data collection, cost-effectiveness, ample time for respondents, ease of following-up, confidentiality, specialized populations, and visual aids (Rea & Parker, 2005; Saris & Gallhofer, 2014). By using the survey as a data collection method, it implements a platform that caters to the interviewee to ensure comfortability, while not being a logistical and financial burden on the interviewer.

Instrumentation

As mentioned, the CPQ is the survey instrument chosen for the quantitative phase of the study. The CPQ used in this study is a 35-item questionnaire, adapted to just include items from the seven factors originally included in 53-item CPQ that was designed as a multipurpose tool that collects data to assist in decreasing attrition (Davidson et al., 2009). The CPQ can help identify reasons for those who do and do not persist by looking at the strength and weaknesses of the data collection process (Davidson et al., 2009). In the Davidson et al. (2009) study, that created the CPQ, the researchers found that in their higher education application of the CPQ it yielded the

following six reliable factors for persistence: “institutional commitment, degree commitment, academic integration, social integration, support services satisfaction, and academic achievement” (p.1). The six factors were consistent with variable groups found in attrition literature and relate to Four Ss explained within Schlossberg's transition theory, and one of the main purposes of the CPQ is to identify and further investigate the variables within the six factors that best assist the group of higher education students that are being affected. The Cronbach alpha for each of the factors is the following: academic integration (.81), social integration (.82), support services satisfaction (.74), degree commitment (.70), institutional commitment (.78), academic consciousness (.63), and financial situation (.85) (Beck & Milligan, 2014; Davidson et al., 2009).

The CPQ compliments this study provided the explanatory sequential mixed method approach by identifying areas that strengths and weaknesses to then further investigate within the qualitative phase. Additionally, Davidson et al. (2009), the initial developers of the CPQ, suggest adding variables that were not included in the original survey development but also related to persistence or attrition strengthen the instrument and benefit the researcher. The variables can come from the specific persistence factors relating to the targeted population and add variables found in other reviews or studies on persistence and attrition such as finances and social supports.

Measurement Scale

The CPQ uses Likert scale scoring that is commonly used in educational research (Boslaugh, 2008). A form of rating scale, a Likert scale is used in questionnaires to measure participant's attitudes, opinions, and perceptions (Boslaugh, 2008). The CPQ is a five point Likert scale questionnaire that uses item responses similar to the following

options: very fair, fair, neutral, unfair, very unfair (Boslaugh, 2008). An ordinal level of measurement, each response option has a score assigned to it such as the following: very fair 1, fair 3, neutral 4, unfair 5, very unfair 6 (Boslaugh, 2008). This allows the response options to have directionality, meaning that four is more negative than three but the researcher is not able to infer that a response yielding a four is twice as negative as a response of two (Boslaugh, 2008).

Quantitative Survey Analysis

For mixed methods research, Creswell & Plano Clark (2018) emphasizes that data analysis is conducted by separately analyzing quantitative and qualitative data using the accompanying methods of the mixed methods design chosen, and then integrating the results from both phases for the final mixed methods research analysis. Data analysis for the explanatory sequential design follows the natural progression of putting quantitative analysis first (Creswell & Plano Clark, 2018). The quantitative data analysis is crucial to the explanatory sequential design, because it allows the researcher to identify areas that are perplexing or unusual and that need to be addressed in the qualitative phase of the study (Creswell & Plano Clark, 2018). In turn, the survey data analysis was shaped by the responses to the questions that targeted variables that the literature found to be impactful for the NJAANG population and undergraduate population in relation to academic persistence (Goodman et al., 2006; Molina & Morse, 2017; Reburiano, 2019; Rumann & Hamrick, 2010).

Upon completion and collection of the CPQ responses, I proceeded to organize and clean the data to ensure that the validity and reliability was not effected by inconsistencies or errors (Osborn, 2013; Rahm & Hai Do, 2000). Data cleaning entails

ensuring that there are no erroneous responses, that all questions have the correct amount of responses and validates the questionnaire, that numeric values are assigned, that a codebook for the for the numeric code is created, that the response rate is appropriate, and that all open-ended responses are appropriately categorized and coded (Creswell & Plano Clark, 2018; Rea & Parker, 2005). Data cleaning can also target resolving literary issues, missing information, or other data quality issues (Rahm & Hai Do, 2000).

Once the data were cleaned, they were inputted into SPSS to execute descriptive statistics and a binomial logistic regression. Descriptive statistics can facilitate organization and description of data collected within a study on the population or sample population researched. Within SPSS the measures of central tendency are observed and noted. Measures of central tendency refers to the statistics that supply a summarizing number that indicates what is standard or typical for the data used (Rea & Parker, 2005). The three leading measures are the following: arithmetic mean, median, and mode. When looking at the mode, the researcher has identified "...the most common category of any ordinal or interval scale variable" (Rea & Parker, 2005, p. 89). The median refers to the center point or midpoint of the data (Rea & Parker, 2005). In order to determine what data holds more or less value compared to median, the data must be able to be listed, and because of this, the data must be on an interval or ordinal scale (Rea & Parker, 2005). Nominal scale does not compute a median based on the inability to organize the data by order or rank (Rea & Parker, 2005).

The arithmetic mean is typically referred to as the average (Rea & Parker, 2005). This measure of central tendency is most commonly used and is an equilibrium point that identifies the mathematical center of the data collected (Rea & Parker, 2005). In order to

calculate the mean, the researcher must sum the units of data and then divide by the number of units collected in total, and the data must be on an interval scale because it not only needs to be organized by rank but the data must also be able to be measured (Fink, 2017; Rea & Parker, 2005).

A correlation coefficient is the measure that identifies the strength of an association between two variables, to determine whether there is a negative or positive relationship. When a negative correlation occurs it means that when one of the variables increases the other variable decreases. For a positive correlation, as one variable increases or decreases so does the other variable. When looking at the correlation coefficient the score ranges from a -1.0, symbolizing a strong negative correlation, to a +1.0, symbolizing a strong positive correlation. A correlation coefficient of zero indicates that changes in the value of one variable are not associated with any changes in the other variables. Thus, the closer the correlation score is to zero, the weaker the relationship no matter the positive or negative score.

A logistic regression estimates how multiple independent variables affect a single dependent variable (Frankfort-Nachmias & Leon- Guerrero, 2018). For this study, binary logistic regression was appropriate because the dependent variable, persistence, is dichotomous and not continuous (Herreid & Miller, 2008). A dichotomous dependent variable allows a researcher to have a simple “yes or no” interpretation (Menard, 2010). When looking at persistence, I looked to see whether or not: yes, the NJAANG undergraduate student persisted; or no, the NJAANG undergraduate student did not persist. Within the field of social sciences and higher education research, logistic regression has become widely used to determine an odds ratio of relationships between

predictor variables and a categorical outcome variable (Frey, 2018, Peng et al. 2002). An odds ratio, the ratio between odds, is important to note because depending on the size of the ratio it determines the size of probability (Sperandei, 2014). Despite the determination of odds ratio between the predictor variables and categorical outcome variables, it is important to note that logistic regression does not suggest that the independent variables cause any particular outcome (Frey, 2018, Peng et al., 2002).

Qualitative Data Collection

Interview

In-depth interviews are commonly used in a variety of research and educational settings (Rubin & Rubin, 2012). I chose an in-depth interview as the qualitative research instrument, given the importance interviewing has on identifying hidden phenomena (Rubin & Rubin, 2012). To pick the participants that were to be interviewed, I chose maximal variation sampling which allowed me to identify and ensure diversity in age, institutions type, ethnicity, service branch, rank, and activation location. In order to be eligible to be selected to the qualitative interview, the interviewed participants must have responded to the entire survey, be or had been a National Guard member during the time of the COVID-19 health crisis, been either activated in response to the COVID-19 health crisis or on orders for two weeks or longer throughout the health crisis, and enrolled at the time of their service at a New Jersey State higher education institution. Based upon the feedback to the question on the survey about voluntary participation in a one-on-one interview with the research, I then emailed or called each participant to see if they were still interested and to schedule a time that worked for their schedule. Each participant gave informed consent and was interviewed using a Zoom application platform and

recording the meet, a phone conversation with a recording of the conversation, or an in-person interview that was recorded using a smartphone application.

Interview Protocol

All of the participants were interviewed using an interview protocol (Appendix B). The protocol used the “main branches of a tree” (Rubin & Rubin, 2012, p. 124) interview structure in which the researcher divides the studied problem into equal parts and assigns a main question to each part. Given the emphasis of Schlossberg’s transition theory, the interview for this study is broken into the Four Ss, the four areas found to be foundational significant for adult transitions, and assigned a main question relating to each Four S. While each Four S has a main question, the questions are logically related back to the topic of transitional persistence relative to the health crisis (Rubin & Rubin, 2012). Proceeding the main question for each Four S, I continued to further investigate the Four S, based on the natural flow of conversation, to ensure depth and richness of each of the four sectors of the transitional theory (Rubin & Rubin, 2012). Despite having a template of questions, the qualitative interview within the follow-up explanatory sequential design emphasizes the importance of shaping the qualitative research phase off of the results from the quantitative survey instrument. Upon conclusion of the survey, additional questions to the interview protocol will be added based on the variables that were shown to be most impactful for transitional persistence.

Qualitative Data Analysis

Preparing the data comes from transcription of text, word for word, from interviews into a word processing file for data analysis (Creswell & Plano Clark, 2018). The transcription process is a time where the researchers can check for accuracy,

formatting, and organization of folders prior to moving forward (Creswell & Plano Clark, 2018). Unlike the quantitative phase, exploring qualitative data analysis pertains to a visual inspection and completing a descriptive analysis to identify the trends in data (Creswell & Plano Clark, 2018). The interview transcripts were the data source reviewed and the initial thoughts of the interviews to start the coding process.

Coding is a process where labels that consist of a word or short phrase symbolizes ideas that are reflecting greater perspectives (Creswell & Plano Clark, 2018). The codes for this study were pulled from prior literature on Schlossberg's transition theory and the data analysis from the quantitative phase. This is an a priori coding method where there codes are collected and documented prior and during the data collection phase (Creswell & Plano Clark, 2018). All of the codes were documented in a codebook, which allowed for continual revision and organization throughout data analysis. Qualitative codebooks are a crucial part of qualitative data analysis. Creswell & Plano Clark (2018) explain that a "...codebook is a statement of the codes for the database." (p. 213) and can be developed throughout the exploration phase.

When coding, a research can have a deductive approach by providing an a priori codebook derived from literature (Azungah, 2018). For this study, I chose an inductive approached and did not provide an a priori codebook in order to ensure that any insider researcher bias was mitigated. As a former NJAANG member, I wanted to avoid producing codes based off of unintentional or intentional bias from my experience as a higher education student throughout my military career. Although the codes would have been supported by literature, I wanted to lessen targeting codes and being unknowingly ignorant to others based off personal or witnessed experiences.

When coding, I used a two-cycle approach. In the first cycle, I coded based on my first impression of the data while taking notes. I then proceeded to complete a second cycle of coding where I looked to collapse and expand codes to best identify patterns within the interview data. For first cycle coding, I used the concept coding method, which Saldaña (2016) defines as assigning “meso or macro levels of meaning to data or to data analytic work in process (e.g., a series of codes or categories)” (p. 119). The concept part of the method refers to assigning a word or short phrase to symbolize the overarching or broad meaning of a single item or action (Saldaña, 2016). By using concepts, the researcher takes a piece of text that is expressing something tangible and creates an idea (Saldaña, 2016). I chose concept method coding based on its ability to apply to all forms of qualitative research, and how it assists in identifying notions that tie back to the concepts inherent to transition theory (Saldaña, 2016).

For the second cycle coding, I used pattern coding due to its ability to group the concepts coded into a smaller number of emergent themes (Saldaña, 2016). Pattern coding is a complementary second cycle coding method as it examines human relationships pertaining to social networks and patterns (Saldaña, 2016). Being able to identify patterns in human networks and relationships aided in the exploration of the transition theory as it helped to explain the participant’s experiences. Once the transcript was coded, the codes come together to create broad themes (Creswell & Plano Clark, 2018). Themes can then come together to be groups of perspectives that can be linked together in order to create a model or provide information on an issue (Creswell & Plano Clark, 2018).

Upon conclusion of transcribing and coding the interviews, the final integration phase began. At this point, both quantitative and qualitative research questions were reexamined based on the data analysis from each phase (Ivankova et al., 2006). After further examination and discussion of the research questions individually, discussion and examination moved to making connections between the two phases to construct a more meaningful understanding of how NJAANG undergraduate students persisted throughout the health crisis (Ivankova et al., 2006). The explanatory sequential design distinguishes itself in its ability to have the quantitative data analysis shape the qualitative data collection, and then examine in a final integration phase how the qualitative analysis explained the quantitative analysis (Ivankova et al., 2006). In all, this particular design allows for a better and more meaningful understanding of the overall issue and allowed me to use the strengths of both methods while mitigating their weaknesses in order to form recommendations for higher education institutions, and the National Guard, on how to better support National Guard undergraduate students transitioning through crisis (Creswell & Plano Clark, 2018).

Legitimation

The assessment of validity in research is referred to as legitimation, and is one of the most important steps of the research process (Benge et al., 2012). Through the legitimation process, researchers can make adaptations to their work and better conceptualize their planning stages and procedures (Benge et al., 2012). For example, if there is a participant sampling issue, the researcher can plan to over sample to offset participants withdrawing from the study (Benge et al., 2012). To assess this studies' legitimation, I used a Benge et al.'s (2012), Creswell & Plano Clark (2018), and Teddlie

and Tashakkori (2009) to identify and address threats of validity both in the planning and interpretation phases of the study. I chose to break down the legitimation threats by each phase of the study methods of the study because it is imperative that multiple strategies to improve the quality of legitimation and inference. Teddlie and Tashakkori (2009) and Creswell & Plano Clark (2018) explain that inference and legitimation of a mixed methods study ensures that data is valid and trustworthy, accurately interpreted, along with ensuring that the conclusions made within each part of the study are based on the data collected. Through the continual review of legitimation, it allowed me to be proactive to best assess and address possible validity threats.

Quantitative Legitimation

As mentioned in the sampling section, a legitimation issue can rise in regards to ensuring the correct sample size (Allen, 2017). The appropriate sample size of the study is important in order to ensure that that the study can be generalized to the entire studied population (Allen, 2017). To combat the issue of sample size, I ran an a priori logistic regression power analysis that determined the study needed at least 113 participants within the quantitative phase in order to be able to be generalized throughout the NJAANG population (Allen, 2017). By identifying the target sample size, the legitimation issue within the quantitative phase was mitigated and allowed me to ensure that the study was generalizable (Allen, 2017).

Qualitative Legitimation

Within the qualitative phase, legitimation issues that researchers face look ensuring that there is an in-depth analysis and mitigating the possibility of neglecting to explain the qualitative phase in detail (Creswell & Plano Clark, 2018). Given the follow-

up explanatory sequential method design, there is an emphasis on the quantitative section, and researchers need to ensure that both phases are not neglected or briefly reviewed (Creswell & Plano Clark, 2018). To mitigate this risk, more time was scheduled for the qualitative phase to ensure that the data analysis is given the appropriate time it needs and to avoid any aspect of ignorance or neglect to the analysis. Given that it is the last research phase, I want to avoid the temptation of finishing the study to enable neglect of the qualitative data analysis.

Mixed Methods Research Legitimation

For the explanatory sequential design, there are a number of validity threats that need to be addressed. Creswell & Plano Clark (2018) talk about the issue of failing to identify important results to explain how and why NJAANG undergraduate students persisted through their schoolwork during the COVID-19 health crisis. To combat this issue I considered a variety of ways to explain the results from the study whether that be looking at significant and non-significant predictors. Second, Creswell & Plano Clark (2018) and Benge et al. (2007) touch upon the threat to insufficiently explain shocking or conflicting quantitative results with the qualitative data. To limit the threat, I ensured that I designed qualitative data collection questions within my interest that attempt to look into the shocking and conflicting data from the quantitative analysis (Creswell & Plano Clark, 2018). Lastly, Creswell & Plano Clark (2018) pinpoint the potential validity threat of lacking a connection with the quantitative analysis and the qualitative analysis. Due to having a separate but connected research framework including quantitative and qualitative methods being the focus of mixed methods research, I ensured to purposefully use participants from the quantitative phase in my qualitative face to ensure

that the data was best followed-up on and explained from one phase to the next (Creswell & Plano Clark, 2018).

Validity Issues in Legitimation

To address any validity issues in legitimation, a validity approach was used to combat possible challenges to mixed methods research. For this study, weakness minimization legitimization was selected based on the quantitative and qualitative phases of the study occurring in sequential stages (Onwuegbuzie et al., 2009). By having the two stages, there may be potential effects on the study based on the interpretation of data within the separate phases of the study. To minimize the compartment effect of the two-phase study, this validity approach compliments the sequential, follow-up design of mixed methods research by having the qualitative phase compliment what the quantitative phase is missing (Onwuegbuzie et al., 2009). Not only were the data followed upon from the quantitative phase, but it also further explored academic persistence to ensure that legitimation concerns are mitigated.

Role of the Researcher

My personal background is in both the military and secondary education. I am a six year New Jersey Air National Guard veteran and a high school physical education teacher. Throughout my time in the military, I have completed graduate coursework and was activated for COVID-19 at a field medical hospital, where I witnessed university students working towards their degrees while moving through multiple transitions. My military experiences enabled me to identify that there is a lack of information on National Guard persistence related to the unique transitions that impact the National Guard subgroup of the military population. Understanding that personal experience can cause

bias, but it was also beneficial to the overall study given the access to population and understanding of the customs and courtesies within the military environment.

An inside researcher refers to a researcher of a study in which they are a member of the population that is being studied and shares characteristics such as identity and language with the participants (Kanuah, 2000; Asselin, 2003). As a member of the NJAANG, I share these characteristics and understand the benefits and challenges that come with being an inside researcher. There are many benefits of inside research, such as participants being more open and willing to trust or accept the researcher given the shared experiences and understanding of the military environment (Dwyer & Buckle, 2009). Although the openness of an inside researcher is a great benefit, it is important to identify that it can cause an issue of bias, especially within the qualitative phase when shaping or moving the interview based on the researcher's experience instead of the participants (Dwyer & Buckle, 2009).

Philosophical foundations and worldviews of the researcher are important in order to better understand and determine a researcher's own assumptions. When looking at Creswell & Plano Clark (2018), the authors spoke to the following main worldviews: post-positivism, constructivism, transformative, and pragmatism. After extensive review of each of the main four worldviews, I determined that I am both a post-positivist and constructivist researcher. When I am in the quantitative phase I am looking at the data collection and analysis through a post-positivist lens and then switch to a more constructivist world view when I am in the qualitative phase of the study (Creswell & Plano Clark, 2018). By using a different worldview for each phase, I am able to apply a perspective that is consistent with the chosen methodological approaches being used in

this study and it facilitates a whole understanding of how and why NJAANG members persisted through their coursework during the COVID-19 health crisis.

Ethical Considerations

Researchers have the responsibility of ensuring that all ethical considerations are understood and applied when formulating, conducting, or concluding a research study. When using a mixed method approach, researchers should ensure that confidentiality, during and between the two phases of the research process, is safeguarded and the appropriate practices are employed (Creswell & Plano Clark, 2018; Rea & Parker, 2005). Within this study, the importance of ethical procedures is heightened due to the institutionalized population and the repercussions that can occur if confidentiality or security of respondents is broken.

Compliance with the institution's Institutional Review Board (IRB) is imperative for researchers in mixed methods research to maintain security and confidentiality was maintained (IRB) (Teddlie & Tashakkori, 2009). Although some of the seeds from the respondent driven sampling came directly from the military, seeds that were based out of higher education institution connections, or information gathered from higher education institutions, all research practices had to align with the approved IRB protocol (Teddlie & Tashakkori, 2009). To ensure my study had an extra layer of protection to facilitate confidentiality, I completed all of the administrative steps needed for IRB approval. It was challenging to ensure confidentiality due to the explanatory sequential design limiting the ability to the qualitative phase not being able to be fully specified ahead of the participants that will be researched and the questions asked of those students until the survey data analysis is complete (Creswell & Plano Clark, 2018). To combat the inability

to fully explain the qualitative phase, I provided a tentative framework of the qualitative interview questions, procedures, and the methods of participant selection. Additionally, I also informed the IRB that upon conclusion of the quantitative survey analysis, I will provide an addendum with the full list of interview questions and interview protocol updates prior to moving forward (Creswell & Plano Clark, 2018).

In order to obtain information from the NJAANG, I gained permission through the chain of command, a military term referring to hierarchy of position, to ensure that each and every organization within the National Guard is in agreement with the research. I used telecommunication, email, and held in-person conferences to inform the commanders about the research that will be conducted and the securities that will be in place. By briefing the commanders and supervisors of the NJAANG, it provided an opportunity to see the objective, research questions, purpose statement, and procedures of research, safeguards, confidentiality, and research methods used. The brief facilitated a similar experience to that of a higher education IRB process, which made the environment for further questioning or concerns more comfortable. In turn, the more transparent the research study was, the more clarity and trust was built between the NJAANG and the research.

For the quantitative phase, it is important to understand and review the issues surrounding web based communication and completion of the survey instrument (Fink, 2017). It is suggested that information be encrypted and ensure that an issue of security breaches or information compromised by an outside party is lessened (Fink, 2017). For the survey used in this study, all information will be encrypted and suggested web browsers will be provided to attempt to control careless errors and purposeful invasion of

the study. Additionally, the survey instrument used is Qualtrics, a reputable survey company that specializes in data collection and web based instruments.

Upon report of data and findings, researchers within mixed methods research need to be careful and ethical in how both are generalized (Collins et al., 2012). This also extends not only to the generalization of the findings to the target population, but to how the researcher presents the information that was found within their study (Collins et al., 2012). This can be strengthened by ensuring that all procedures of the research are standardized across all phases of the mixed method model and the administration of the survey and interview protocol does not deviate from participant to participant (Creswell & Plano Clark, 2018).

Chapter 4

Overview of Findings

The following chapter provides an overview of the findings that emerged through the mixed methods research process of data collection and analysis. This research sought to identify how and why NJAANG undergraduate students persisted through their coursework while serving during the COVID-19 health crisis in order to better understand and assist NJAANG undergraduate students through multiple transitions. These findings derived from information gathered through the adapted College Persistence Survey (CPQ) distributed through both military and higher education avenues and from individual interviews with NJAANG undergraduate student volunteers. Chapter 4 also provides the groundwork for scholarly articles that follow in the final two chapters of this dissertation. The goal of this research was to explore how and why NJAANG undergraduate students persisted throughout the multiple transitions of the COVID-19 health crisis through five main questions:

1. To what extent did NJAANG undergraduate students who served through the COVID-19 health crisis persist within the higher education system?
 - a. Does persistence differ based on race/ethnicity, gender, socioeconomic status, or age?
2. How do NJAANG undergraduate students describe the impact of the timing of the health crisis on their coursework? (Situation)
3. What values do NJAANG undergraduate students describe as having the most influence on their ability to persist through their coursework during the health crisis? (Self)

4. What higher education institution social supports did NJAANG undergraduate students report experiencing that aided in their ability to persist through the health crisis? (Support)
5. How did NJAANG undergraduate students use coping mechanisms to persist through their coursework during the health crisis? (Strategies)

Chapter 4 is arranged to provide an overview of the participants of the study, and then follows with a discussion of the quantitative analysis, qualitative analysis, and the relationships between the two outputs from the data collection in order to provide recommendations for higher education institutions based on the findings.

Description of the Participants

The participants of this study were NJAANG undergraduate students that attended both two and four-year higher education institutions across New Jersey. Participants served throughout the health crisis for at least two weeks during the 2020 spring semester through the 2021 spring semester (3 semesters total). The survey was disseminated through almost all of the two and four-year state institutions, using respondent driven and purposive sampling. At the conclusion of the quantitative data collection, there were 125 respondents, and after data cleaning there were 113 respondents in the quantitative analysis. Of the 113 survey respondents, 78 persisted through their coursework and 35 did not persist. While 113 respondents volunteered for the survey, only 34 volunteered and committed to participate in the interview section of the study. The demographic breakdown for the quantitative respondents is provided in Appendix G.

When looking at the responses from the participants, there was some information about the sample population that was notable for representation. Of the 113 participants,

29% of the students did not academically persist while 71% of students did persist.

Despite the high academic persistence, the responses still indicated that a little over 1 in 4 students did not persist. Additionally, 48% of the respondents did not respond as White, having a higher minority percentage than the National Guard as a whole (U.S Department of Defense, 2020). Moreover, 48% response rate for woman, also highly surpassing the demographic percentage for the National Guard (U.S Department of Defense, 2020). 27% of the responses had a mother's education level of a 4-year degree and only .8% above with a professional degree. Lastly, 56% of the respondents were are in the age range 19-22 years old which mimics the traditional undergraduate rate and reflects the largest population sub group of the National Guard population (U.S Department of Defense, 2020).

The participants for the qualitative phase of the study were selected based on a maximal variant sample to avoid similitude. Out of the survey respondents who volunteered for an interview, participants were selected to ensure that there was diversity amongst the respondents interviewed. The interviewed participants were contacted via email communication to confirm their commitment to volunteer for the interview, and out of the 34 who initially volunteered through survey, 12 were picked. Of the participants interviewed, seven persisted and five did not persist. The demographic breakdown of the qualitative participants are provided in Appendix H.

Discussion of the Quantitative Findings

The first research question and sub question, sought to understand which NJAANG undergraduate students persisted throughout the health crisis and how they accomplished it. Through the dissemination of the adapted CPQ, the survey collected

data by using variables derived from the original CPQ (e.g., academic integrity, institutional commitment, social integration, supportive services satisfactions, academic consciousness, financial, degree commitment) and added descriptive variables (e.g., age, race, gender, and socioeconomic status) that sought to understand who and how NJAANG undergraduate students persisted. Upon conclusion of the survey response period, a binary logistic regression was run to identify which CPQ variables were the most significant in the ability to persist. Additionally, demographic variables were also put through the logistic regression, within block to, in order to answer the sub question to research question one and determine which variables best support persistence (see Table 1). The binary logistic regression, run through SPSS software, was used based on the two-part answer to the survey question asking whether a student did or did not persist through the health crisis.

Table 1*Binary Logistic Regression*

	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for Upper	95% C.I. for Upper
Step 1a					.160			
AI	-.112	0.08	1.971	1		.894	.765	1.045
ISC	.131	.055	5.728	1	.017	1.140	1.024	1.270
SI	.048	.068	.497	1	.481	1.049	.918	1.199
SSS	.044	.064	.473	1	.491	1.045	.922	1.184
AC	1.56	.069	5.052	1	.025	1.169	1.020	1.339
FS	.069	.059	1.362	1	.243	1.071	.954	1.202
DC	.017	.043	.146	1	.702	1.017	.934	1.106
Constant	-3.247	1.644	3.965	1	.046	.038		

Results of the binary logistic regression, as seen in Figure 1, identified that two variables from the CPQ were significant to academic persistence for the NJAANG undergraduate population. The two were academic consciousness (AC) and institutional commitment (ISC). A variable is determined to be significant in a binary logistic regression when the p-value score, also represented as ‘sig’ on Table 1, is < .05 (Menard, 2010). With AC having a p-value of .025 and ISC having a p-value of .017 each are determined to have significance. Additionally, the Exp(B) score has a correlation of the higher the number the more likely a student is to persist. When looking at Figure 1, both AC and ISC have the strongest coefficient value for the EXP(B) with AC being 1.169 and

ISC being 1.140. This further supports that these two variables have the strongest impact on persistence for the NJAANG undergraduate students out of all of the variables tested in the adapted CPQ.

Table 2

Block Two Inclusion with the Binary Logistic Regression

		B	S.E.	Wald	df	Exp(B)	Sig.
Step 1a	AI	-.144	0.84	2.976	1	.866	.085
	ISC	.157	.060	6.896	1	1.170	.009
	SI	.057	.071	.646	1	1.059	.422
	SSS	.061	.065	.886	1	1.063	.346
	AC	1.49	.071	4.336	1	1.160	.037
	FS	.065	.060	1.199	1	1.067	.274
	DC	.022	.045	246	1	1.023	.620
	Race	-.031	.069	.199	1	.970	.656
	Socioeconomic	.191	.150	1.622	1	1.211	.203
	Gender	-.302	.506	.356	1	.739	.551
	Age	-.054	.066	.680	1	.947	.409
	Constant	-2.248	2.725	.680	1	.106	.409

a. Variable(s) entered on step 1: Race, Socioeconomic, Gender, and Age.

Upon review of the full binary logistic regression output (see appendix F), the analysis had 74% predictability rate that a NJAANG undergraduate student would persist versus a 30% predictability rate that a NJAANG undergraduate student would not persist. The Naglekerke R Square analysis yielded a 24% of persistence, which is a medium effect size. The classification percentage was 76.9%, about 6% higher than the

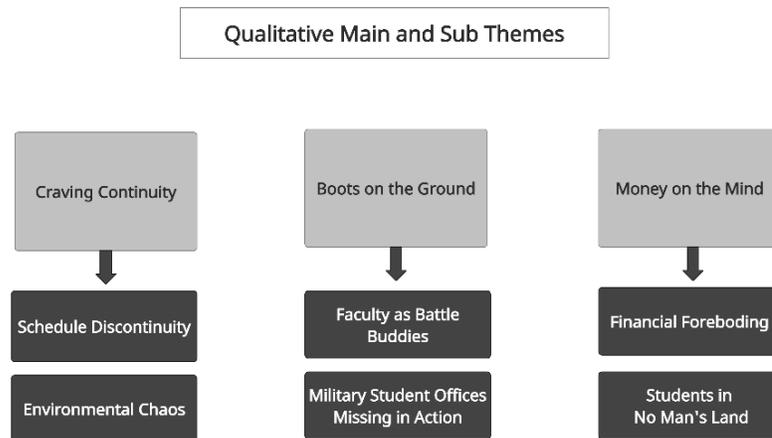
predictability percentage. Overall, the high rate of predictability is a delimitation, due to the high predictability rate. Following the binary logistic regression analysis related to the adapted CPQ, a second step of a block two analysis using the demographic variables was conducted (see Table 2). When viewing the block two output, all variables yielded a p-value of $>.05$ resulting in all being non-significant (Menard, 2010).

Discussion of the Qualitative Findings

The research questions for the qualitative strand sought to explore how NJAANG undergraduate students academically persisted through the health crisis in reference to each sector of Schlossberg's Transition Theory. The qualitative phase of this study consisted of one-on-one, virtual interviews with respondents from the quantitative strand. The interview participants were selected based on maximal variant sampling, to ensure diversity and mitigate similitude. Following participant selection, an interview was conducted using an interview protocol that was designed around Schlossberg's Transition Theory and supplemented by questions derived from the findings in the quantitative data analysis. After the interviews were completed, all transcripts were coded through a two-cycle process. The first cycle consisted of concept coding, and then followed by a second cycle of pattern coding. Following the two-cycle coding process, the themes, as seen in Figure 3, were drafted to fully conceptualize what emerged from the qualitative data.

Figure 3

Theme Analysis After Qualitative Data Collection



The themes seen in Figure 3 were generated based on the second cycle coding analysis. The participants focused on the following three main themes that were expressed throughout the 12 different interviews: craving continuity, boots on the ground, and money on the mind. The participants emphasized the need for continuity, scheduling, and structure. This manifested in the importance and identification of the multiple schedule changes and adaptations in a NJAANG undergraduate student's academic, personal, and military lives simultaneously. In addition to the consistent want for schedule sustainability, there was a discontentment with the resources, while identifying the importance of relationships throughout all aspects of academic, civilian, and military environments for the participants. Lastly, the emergence of financial unsustainability exemplified a large concern about finances throughout the health crisis and highlighted the fear and importance of financial academics regarding considerations persistence for all 12-interview participants.

Craving Continuity

Interview participants described a want or need for continuity throughout the multiple different transitions occurring throughout the health crisis. The participants expressed struggling with the varying military and civilian schedules, the multiple changes in the class environment, and the lack of consistent communication in both military and civilian sectors. Emerging as sub themes, the consistent lack of continuity continually influenced the ability to have a stable learning environment and schedule.

The interview participants spoke to the lack of consistent study environments transitioning between military and academic work within the study environment, and the impact of studying through trauma stemming from their military environments. One participant spoke to the strain of attempting to complete their academics in a tent wearing a hazmat suit, all while being interrupted to move body bags. While the participants attempted to study, the environment subjected them to trauma and consistent interruptions. In addition, students who were not in activation environments spoke to the hardships of being at home while working on their coursework through consistent demands to complete military work and adhere to assignment due dates simultaneously. Additionally, students were greatly impacted by the change in the learning environment from the in-person to online educational transition. These students explained that the continual physical and emotional changes in environments on and off orders created multiple different challenges regarding their educational experience.

The impact of turbulent schedules in the military, educational, and civilian environment affected the participant's ability to persist through their coursework. All interview participants spoke of the struggle with the turbulent change in schedules within

the military environment causing issues with identifying time to study and the overall ability to complete schoolwork. Since the health crisis limited the participant's ability to leave and go places in their civilian lives, there was also a lack of structure in their schedule causing a hardship in adaptation to self-creating a schedule to complete schoolwork.

Boots on the Ground

Boots on the ground speaks to the military slogan of providing multi-dimensional support physically, mentally, and emotionally. All students interviewed spoke to the importance of multifaceted support being pivotal to their ability to persist through the health crisis. The second cycle coding formulated this theme through mentions of family support, military supervisor support, academic adaptation support, military peer support, civilian in-class peer support, and mental health support. When integrated, the two sub themes of faculty as battle buddies and military student offices missing in action materialized.

The interview participants spoke to the importance of relationships in their life stemming from the interpersonal relationships regarding family, romantic partners, military friends, military supervisors, professors, and in-class peers. All of the relationships allowed the participants to feel universally supported which is important given the high rate of military to civilian transitions occurring. The participants expressed that when they transitioned between military and civilian environments, their avenues of support tended to change. This participant pool had to adapt between support coping mechanisms and avenues of support in order to mentally, physically, and academically persist. If the avenues of support stayed universal and stable, it tended to positively

influence academic persistence. Likewise, the participants spoke to the importance of support by professors, military supervisors, and family members and how it greatly affected their academic persistence. Having supports that were constant and reliable throughout all sectors of the participant's transition period, mitigated stress and fostered confidence that allowed this student population to have a solid foundation to support academic persistence through transitions.

All interview participants mentioned the importance of resource support in order to mitigate the stress of the multiple transitions throughout the health crisis. Resources included academic resources such as adaptations to school work, alternate assignments or materials, and online resources to increase access to educational material. By having these increased physical supports, the participants explained that they had more opportunities to complete their schoolwork and it eased the burden of attempting to rely on limited resources within their hectic, changing environments.

Money on the Mind

Financial worries and dependence throughout the health crisis was a major topic for all of the students interviewed. Money on the mind, as a theme, encompasses the experiences of the interview participants who were impacted by self and family job losses, an uncertainty in how military funding would be transferred to the online environment, and the overall ability to financially support the household with income streams lessening. Overall, the codes for this theme formulated two sub themes of financial foreboding and students in no man's land, which further explore the two sectors of this main theme.

Throughout the interviews, all participants expressed a fear or anxiousness regarding their finances. Some students voluntarily went on orders because of job loss, household job loss, or the fear of job loss. Others worked multiple jobs, creating further stresses on academic persistence, to further supplement household income in order to ensure there was a consistent stream of wages. This constant feeling of financial foreboding impacted their mental health and ability to focus on their schoolwork. With mental health struggles stemming from financial stress, the fear continued to grow and the challenges throughout the continued transitions surmounted for many interview participants. Challenged with financial stress, the participants were more willing to volunteer for military orders or multiple jobs in order to ease their financial anxiety despite knowing the possible accompanying academic struggles.

All participants spoke to the importance of the military academic funding opportunities such as the Montgomery GI Bill and National Guard Tuition Waiver. The availability of military academic funding streams was emphasized throughout the interviews as imperative to support academic persistence. Exploring further, all surmised that military funding was a main factor for providing access to higher education and that it may have been impossible to pursue higher education without it. Despite the heightened importance of the need for funding avenues, participants also spoke about inequities that present barriers to persistence. The inequality regarding military academic funding avenues surrounded the National Guard Tuition Waiver, and the inability to use it beyond tuition. The strict policy regulated application of funds solely to tuition coverage caused further challenges to academic persistence outside of tuition financial

strains, exemplifying the importance of continual review and to ensure that the funding streams are equitable to all NJANG undergraduate students.

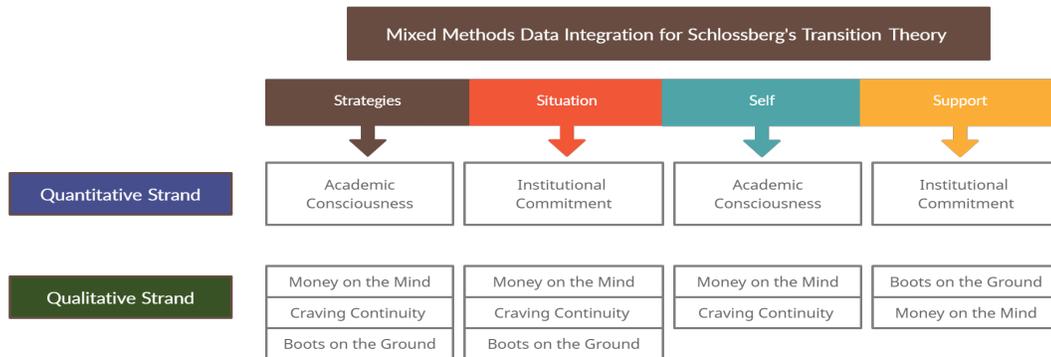
Integration

Integration between the quantitative and qualitative sections of the study occurred in the explanatory sequential mixed methods sequences as noted in Chapter 3. Within this model, two integration periods occur throughout the research process. The first integration of data occurred at the conclusion of the quantitative phase of the study. The interview protocol was updated with three questions that further explored areas where the quantitative data analysis lacked either information or where further exploration was needed based on the quantitative results. One question further explored the New Jersey National Guard tuition waiver and its influence on persistence for the interview participant. The tuition waiver question was added to the protocol due to a great amount of finance variable questions being omitted in the adapted CPQ. The other two questions were follow-up questions to see if the participants felt the same way before the health crisis and after the health crisis to identify if it was a continual influence on transitions or particular to the health crisis.

Upon the conclusion of the qualitative phase of the study, the second integration period started by combining both strands of analysis to conclude the overall findings of the research. To finish the mixed methods model, it was important to identify how the data analysis related to Schlossberg's Transition Theory. In Figure 4, it exemplifies how each strand of data related to Schlossberg's Transition Theory, with the strategies and situation sections showing the most significant for NJAANG undergraduate academic persistence throughout the health crisis.

Figure 4

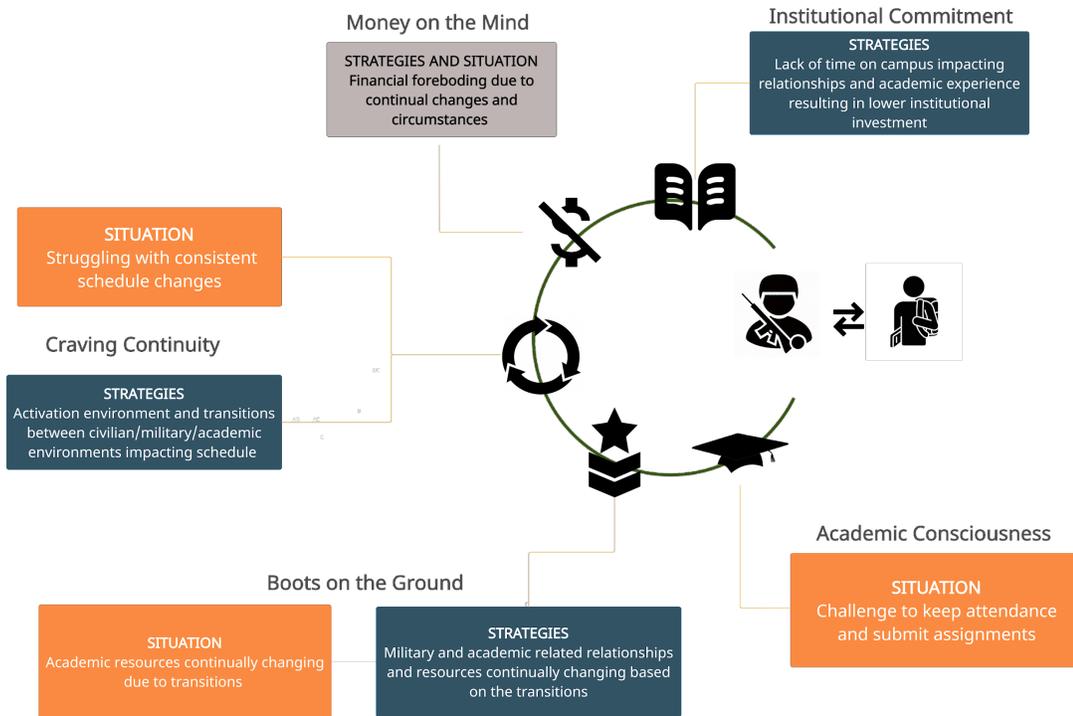
Second Integration of Data



Despite all quadrants of Schlossberg's Transition Theory being part of the overall picture of support through transitions, the two sectors of situation and strategies are found to be most significant for NJAANG undergraduate academic persistence. Upon review of the two significant quadrants, the explanatory mixed methods research design second integration phase further explored how the two data strands interweave to better support persistence for this population. Figure 5 lays out how the significant findings shape how the NJAANG undergraduate student study participants are best supported and the areas of impact regarding academic persistence.

Figure 5

Summation of Findings



After the two strands of data were integrated to identify which quadrants of Schlossberg’s Transition Theory was most significant, understanding how the integration of data and significant quadrants came together to support the NJAANG undergraduate student was seen Figure 5. The diagram provides a ring-like structure that has an icon of the five most notable areas of the data strands and a statement of how it influences academic persistence for the respondents of the NJAANG undergraduate population. Each theme or variable is crucial to academic persistence, and with one part of it missing, there would be a disconnection or gap in support, impacting academic persistence for this population. This is similar to Schlossberg’s Transition Theory where all four quadrants

are important and part of the transitioning process, but that certain quadrants may be more significant to certain populations. This figure exemplifies how the strategies and situation quadrants are so significant and can provide recommendations for higher education institutions to best support and understand the NJAANG undergraduate population.

Limitations

Throughout the study, limitations were identified as possible areas to further explore or identify when looking at the findings. This study looked at academic persistence through three semesters of the COVID-19 health crisis, rather than long-term academic persistence. Students may have returned to school after the health crisis and academically persisted or may have not persisted after the three semesters. Additionally, the study lacked socio-demographic variables, which may have looked further into the population and identify differences in academic persistence. Lastly, the non-significant results from the quantitative phase of the study may be result of the sample of the population of National Guard members included in the study.

Recommendations for Institutions

Through the emergence of the findings, three key points were highly apparent on how higher education institutions can take measures to better support persistence for the NJAANG undergraduate population. Stemming from the integration of both data strains, factors such as funding pathways, policy impacting continuity, and upgrading resources for NJAANG undergraduate students are three components that can be of focus for higher education institutions when looking to better support NJAANG undergraduates through their academic endeavors.

While the financial variable did not come up as significant within the quantitative strand of data, the issue of financial stability emerged in the qualitative interview phase. This was in part, due to many NJAANG undergraduate students omitting questions based on their receipt and use of the NJ National Guard tuition waiver, Montgomery G.I. Bill kicker, and other military funding avenues. After conducting interviews, almost all students mentioned the importance of the tuition waiver. While most touched upon how it played a vital role in their ability to obtain a higher level of education, almost all spoke to the areas in which the National Guard waiver was unable to be used and waived on financial coverage for necessary academic items needed to persist through the multiple transitions. An equity issue emerged, because students who were covered by FASFA for their tuition, had the National Guard tuition waiver nullified because it could not be used on housing or supplies due to the strict policy surrounding its use and prohibiting payment outside of tuition. The tuition waiver then covered students who did not have their tuition covered by FASFA. Yet, lower-income students who received money from FASFA no longer received any benefit from the waiver and had to rely on the few hundred dollars a month from the G.I. Bill Kicker to pay for housing and other academic resources. Higher education institutions can best address this issue by advocating for their students while at policy meetings with state officials and providing funding pathways to ensure that NJAANG undergraduate students are equitably receiving funding to support rather than strain persistence through the stability of funding.

Drawing from both data strands, there was an emphasis on maintaining a stable daily structure and schedule in order to support persistence through the multiple transitions NJAANG undergraduate students' experience. Students expressed that a

reason for the wavering in structure and schedules stemmed from the consistent transitions between military and civilian environments. Not only did the daily schedule continually change, but the inability to be in one environment continuously made students feel a lack of institutional connection and felt that their needs as NJAANG undergraduate students were invisible to their professors. To address the lack of visibility, higher education institutions can implement cross-office professional development educating on the NJAANG undergraduate student so that each sector of the higher education institution better understands National Guard undergraduate students. By providing professional development, higher education staff and professors can fortify their knowledge foundation of the NJAANG undergraduate student population in order to create stronger policies pertaining to NJAANG undergraduate students and to supplement or ease transitions for NJAANG undergraduate students. By having stronger policy and a knowledgeable faculty and staff understanding of the NJAANG undergraduate population, it can lead to improved resources to facilitate the continual transitions this student population encounters.

The need for support resources, in both relationship and academic sectors, emerged as necessary to mitigate stress throughout transitions and support persistence. All interview participants spoke to the importance of having support and relationships at the academic institution. Despite this, interview participants felt that there was a lack of connection to other students due to their inability to stay in class for long periods of time and incapability to connect or maintain relationships with their in-class peers. While students stated they worked with their military student's office, NJAANG undergraduate students emphasized that deficiency of consistent communication with their military

office, the lack of support from the military office staff, and the absence of credible and up-to-date information from their military student offices. By focusing on how to build this office to better understand the importance of this particular military student, and updating policy and procedures in order to better advocate for NJAANG undergraduate students, higher education institutions can provide better support by cultivating a welcoming and safe space for NJAANG undergraduate students to continually return to throughout and after their transitions. Additionally, by providing spaces and programming for NJAANG undergraduate specific students to get together, it can provide opportunities to form relationships with peers who share similar experiences.

Conclusion

This chapter provided a synopsis of the key findings from this mixed methods research and allowed for a better understanding of who and how NJAANG undergraduate students persisted throughout the multiple transitions of the health crisis. The data collected for this study offered the ability to create recommendations for higher education institutions to provide a better understanding of how to best support National Guard, and in specific, NJAANG undergraduate students through multiple transitions. Additionally, the recommendations from this study provides insight into who the NJAANG undergraduate student is and how their needs differ to better support persistence. Although financial issues, resource support, and a reliance on structure and scheduling is important for NJAANG undergraduate students, there are other challenges that impact the ability to connect to build and sustain institutional commitment. In addition, the NJAANG undergraduate students who lack relationships on campus and are continually

transitioning in and out of the classroom are absent and not able to connect back to the higher education incision to build and sustain academic consciousness.

The following chapters provide manuscripts constructed for an empirical journal publication (Chapter 5) centering on the impacts on persistence for the NJAANG undergraduate students through the multiple transitions of the health crisis and a practitioner journal publication (Chapter 6) that focuses on the recommendations for higher education professionals on the needs and supports for academic persistence for the NJAANG undergraduate population. These articles focus on supplementing the literature on how understanding the factors that impact persistence for the NJAANG population can help higher education intuitions better understand who this population is, how to better assist them, and avenues to better support their academic persistence.

Chapter 5

Combat On and Off the Battlefield: How New Jersey Air and Army National Guard Undergraduates Persist Academically through Crisis

Abstract

New Jersey Air and Army National Guard (NJAANG) undergraduate students endure multiple transitions throughout their academic career. In 2020, for example, the COVID-19 pandemic caused numerous activations and manning demands for the NJAANG population, further stressing coping methods. Using the follow-up, explanatory sequential mixed methods research design and Schlossberg's Transition Theory, I explored the academic persistence of the NJAANG undergraduate student population to better understand how and why NJAANG undergraduate students were able to persist through the heightened number of transitions during the COVID-19 health crisis. As an often-invisible group on campus, this study uncovered that NJANNG students were best supported through stabilizing continuity, supporting academic funding avenues, and an increase in physical and relational resources. Furthermore, this all leads to question whether higher education institutions are appropriately supporting their National Guard undergraduate students.

Keywords

Persistence, transition theory, National Guard, higher education, undergraduate students, mixed methods

Introduction

College students benefit from stability and consistency in their educational environments. When undergraduate students face challenges such as medical issues or family emergencies that disrupt that stability, the consequences can often lead to their lack of investment in the institution and subsequent attrition (Astin, 1984; Herpen et al., 2020; Turner et al., 2017). However, individuals that persist amidst these environmental pressures end up developing a stronger sense of identity as a student that leads to further engagement in their education and retention at the institutional level (Astin, 1984; Herpen et al., 2020; Turner et al., 2017). The factors for educational persistence of the general undergraduate student population are more well known, however, for certain student populations the instability of their educational experience and their educational environment is more of a regular occurrence (Gray et al., 2013; Hossler et al., 2009; Kohen et al., 1978).

One of those student populations is the Air and Army National Guard (AANG) student population. As a student population that continually transitions in and out of the classroom, there are likely important lessons to be learned from this group as to how and why students persist through periods of instability and chaos. Such knowledge could be used to create and execute policies and practices to minimize the impact of disruptions and support students through transitions to improve retention and educational success. One of the most recent examples of the frequent and unpredictable transitions that AANG students face was the COVID-19 health crisis. Learning from New Jersey AANG students about their perseverance through this crisis could be crucial to uncovering some of the most influential factors for persistence. As the COVID-19 health crisis exploded

in the state of New Jersey in March of 2020, state agencies employed emergency plans to combat the spread of the virus. In immediate response to the rising infection rates, over 100 New Jersey Air and Army National Guard (NJAANG) members were activated to support medical personnel and to secure and build impromptu field medical stations, veteran home assistance teams, and COVID-19 testing facilities (O’Dea, 2020). As the pandemic persisted, the number of NJAANG members activated rose to 700, with members assisting in testing locations and nursing homes across the state (Hecht, 2020; O’Dea, 2020). The activations continued through May of 2021 with over 1500 NJAANG activated as vaccination distribution and veteran homes needed operational staffing and continued assistance (Axelrod, 2021; Levinsky, 2020).

While all New Jersey public university undergraduates were attempting to handle the multiple different transitions of the health crisis, like the transition to online education implemented in March 2020, NJAANG students were further impacted by the rapid military to civilian transitions occurring. Unlike typical undergraduate students, NJAANG students were attempting to persist despite enduring academic, civilian, military, financial, and health transitions occurring simultaneously (Hecht, 2020; O’Dea, 2020; Smally, 2020). Regardless of the differences, NJAANG undergraduate students are inappropriately categorized with other military branches or assimilated as non-traditional students and may not receive the support they need to persist (Vacchi, 2012). The severity and frequency of their transitions during the pandemic highlighted the need to explore their experiences with persistence. The purpose of this explanatory sequential mixed methods study was to identify how and why NJAANG undergraduate students persisted through their coursework while serving during the COVID-19 health crisis to

better understand and assist the NJAANG undergraduate students through multiple transitions. Using a follow-up explanatory sequential design and Schlossberg's Transition theory draws attention to the specific areas of transitional supports for academic persistence for this population.

Literature Review and Theoretical Framework

When gaining an understanding about the National Guard undergraduate student population, it is important to explore their position in higher education based on the differences they face in comparison to traditional students, non-traditional students, and other military students. National Guard members are a part-time component of the military, often switching between civilian and military environments. This differs from their active duty peers who are transferring between military and civilian environments continually throughout their service contract. Compared to active duty service members, the National Guard population is less researched in higher education research compared to their active duty peers (DiRamio et al., 2008; Rumann & Hamrick, 2009). Studies largely focus on the impact of active duty transitions to the classroom, the effects of war zone deployments on the military student, and post-service transitions back to higher education (Ackerman et al. 2009; Baechtold & De Sawal, 2009; DiRamio et al., 2008; Elliott et al., 2011; Jackson & Sheehan, 2005; Rumann & Hamrick, 2009; Woodruff et al., 2006). The following review of the literature on National Guard students will be structured by Schlossberg's Transition Theory, the framework of this study, to underscore the critical need to explore this student population further.

Schlossberg's Transition Theory

Schlossberg's (1984) transition theory, the theoretical framework applied in this research, is used extensively to understand anticipated and unanticipated self-defined changes in students' routines, relationships, assumptions, and roles because of transitions. Schlossberg's (1984) transition theory provides an understanding of adult coping strategies through transitional periods and allows the reader to see the breakdown of current research concerning four sectors or "Four S" (Schlossberg, 2011, p. 160). The Four Ss are found to affect an adult's transitional experience and are categorized into the following sectors: situation, self, support, and strategies (Schlossberg, 2011). NJAANG undergraduate students continually transition in and out of the civilian and military environments throughout their academic endeavors. To elucidate the variety of factors influencing a National Guard undergraduate student's ability to persist through these disruptions, Schlossberg's transition theory was used for this study to highlight the multiple factors that influence a person's ability to handle transitions (Goodman et al., 2006).

Self. Schlossberg (2011) refers to the "self" (p. 159) as the ability to be internally resilient, in order to cope through a situation and transition. Internal strength, such as the ability to be optimistic, can provide a difference in perspective to support them through transitions (Schlossberg, 2011). Goodman et al. (2006) further emphasizes the importance of focus on related internal issues of identity, self-confidence, self-development, self-outlook, self-advocating, values, and autonomy. As the National Guard undergraduate student transitions in and out of the educational environment, their self-development continues to evolve based on their experiences. Research shows that

National Guard undergraduate students are unique among their military colleagues based on the unpredictable and continual transitions between civilian and military environments (Bauman, 2009; Molina & Morse, 2017; Rumann & Hamrick, 2009). As a result of the unpredictability of the transitions, National Guard undergraduate students face many barriers to their education (Rumann & Hamrick, 2009). Unique to the National Guard population, the continual changes in schedule throughout the transitions between the civilian and military environments, consistent confusion in expectations, unclear policy on financial benefits, and lack of personal relationships causes interruptions in environmental, mental, and academic continuity (Rumann & Hamrick, 2009). This lack of continuity translates to lower academic consciousness and overall academic persistence while withstanding the number of transitions that the National Guard undergraduate population faces (Rumann & Hamrick, 2009).

Situation. The “situation” concept of Schlossberg’s (2011) transition theory refers to the location of the transition and the person’s situation at the time of transition. Based on life circumstances at the time of transition, the decisions made during the transitional period may be situational and may not have been decided upon in the same manner if the transition occurred at a different time (Schlossberg, 2011). This includes control, role changes, duration, concurrent stress, assessment, triggers, and timing (Goodman et al., 2006). Challenges within the situation Four S lies within the importance of having a sense of control over what is occurring throughout periods of transition (Gilbert & Griffin, 2015). When higher education institutions support and implement communication for military students, it can mitigate barriers to academic persistence by

providing a sense of control while National Guard students are continuously cycling through the military and civilian environments (Gilbert & Griffin, 2015).

Given the complexity of the higher education environment, regarding the administrative and financial policy and procedures, it can be challenging for a military student to identify support information to stabilize a continuous schedule and reliable relationships through the transitions to limit stressors (Anderson et al., 2012; DiRamio et al., 2008; Gilbert & Griffin, 2015; Moon & Schema, 2011). Additionally, Griffith (2010) found that the National Guard population of the United States military tends to have low expectations regarding deployment occurrences, resulting in less preparation for military deployments and transitions. The lack of readiness throughout the process of a transition can cause an undeveloped foundation of information or communication pathways to hinder or influence academic persistence (DiRamio et al., 2008; Gilbert & Griffin, 2015, Griffith, 2010).

As National Guard undergraduate student's transition in and out of the military environment, they experience the critical, pervasive issue of financial continuity and instability. How does this function as "situation"? According to Griffith (2011), there is little financial hardship during and after a large-scale deployment for the typical National Guard member. However, the study did not consider the subset of undergraduate students within the deployment population. Molina & Morse (2015) characterized the financial profile of the National Guard undergraduate students: National Guard undergraduate students have the highest adjusted gross income of about \$47,504.00, over \$13,000.00 more than the second highest military undergraduate. While this difference may lead to assumptions regarding the National Guard student population's financial stability, they

receive the least Veterans Administration and Department of Defense educational benefits, have the second highest student loan debt, and are more likely to be employed in a part-time capacity (Molina & Morse, 2015; Molina & Morse, 2017). The long-term impact of educational debt, the lack of academic military benefits in comparison to other military populations, and the impact of inconsistent income in conjunction with the military to civilian transition impact can create financial hardships that differ from their military student peers in and outside of the National Guard (Molina & Morse, 2015).

Support. The “support” section of Schlossberg’s transition theory focuses on the support system used or available for an adult at the time of a transition and its importance on an adult’s wellbeing (Schlossberg, 2011), which includes intimate relationships, family units, networks of friends, and relationships with institutions or the community (Goodman et al., 2006). As a whole, military undergraduate students were reported by DiRamio et al. (2008) to experience anti-military bias from their higher education institutions, by professors violating anonymity through purposeful, public inquiry into their experiences to add military knowledge, and the use of other uncomfortable tactics such as consistently requesting or sifting for person stories or experience from their military service. Despite the lack of support being a barrier to creating impactful relationships, military students use their resiliency to seek the same social environment they had in the military; however, the sense of comradery and structured environment of the military creates social connections that are hard to replicate within the higher education environment (Blaaw-Hara, 2016). As a response, military students seek peers and faculty who are relatable through military undergraduate student organization and

nontraditional student groups (Blaaw-Hara, 2016; Gilbert & Griffin, 2015; Livingston et al., 2011).

Through the transaction of tuition for service, it has been incentivized for NJAANG members to enroll in higher education while balancing their service. Despite the deficits on college campuses, NJAANG undergraduate students continue to bear the transitional process and develop coping mechanisms to bypass short falls and academically persist. The COVID-19 activation was unprecedented for the United States and forced NJ-AANG undergraduate students to stress their transitional coping methods. Not only did they transition between educational, civilian, and military environments, but there was also a change in the health and safety of their overall surroundings that impacted each transition. Given the novelty of the COVID-19 activation, examining undergraduate NJ-AANG students who persisted will provide insight into areas that directly impacted a NJ-AANG undergraduate student's ability to persist during a health crisis.

Strategies. The strategies section, and the last section of Schlossberg's (2011) transition theory Four S system, explores the various roles people play in managing their behaviors. The variables of behavior management are based on the following three categories: variables that modify the issue or situation, variables that control the meaning of the issue, and the variables that aid in managing stress post the situation occurring. Goodman et al. (2006) emphasized using coping mechanisms to stabilize or modify those variables to ensure individual flexibility is provided as a strategy to combat issues, such as, related to this Four S section.

Military students who are navigating the higher education environment can do so with correct information and points of contacts that allow them to make independent, strategic decisions in the areas such as funding, academic programs, and mental health. However, a barrier in the transitional process was fostered when there was an encounter with a faculty member, educational leader, or advisor that lacked the correct information or was impolite (Gilbert & Griffin, 2015; Wheeler, 2012). The barrier created by a lack of accurate information emphasizes the importance of research that shows that there is a need for training faculty and staff members on the needs and concerns of military undergraduate students (Wheeler, 2012). When staff and faculty are trained, military undergraduate students have less barriers and can be more independent on campus, because faculty and staff are more understanding and can better assist military students with their questions or concerns (Gilbert & Griffin, 2015; Wheeler, 2012).

Methods

This sequential explanatory mixed methods study explored the NJAANG undergraduate students through a quantitative survey phase and a qualitative interview phase, with a specific focus on how and why NJAANG undergraduate students academically persisted throughout the health crisis. In the quantitative phase, I employed the adapted College Persistence Questionnaire (CPQ), with additionally descriptive questions, to explore how the NJAANG undergraduate population persisted, who the participants were, and to identify areas for further inquiry within the qualitative phase of the study. In the qualitative phase, I conducted one-on-one interviews with NJAANG students to conceptualize their lived experiences and to deepen understanding of NJAANG undergraduate challenges that impacted academic persistence.

The following research questions drove this exploration:

1. To what extent did NJAANG undergraduate students who served through the COVID-19 health crisis persist within the higher education system?
 - a. Does persistence differ based on race, gender, age, or socioeconomic status?
2. How do NJAANG undergraduate students describe the impact of the timing of the health crisis on their coursework? (Situation)
3. What values do NJAANG undergraduate students describe as having the most influence on their ability to persist through their coursework during the health crisis? (Self)
4. What higher education institutional social supports did NJAANG undergraduate students report experiencing that aided in their ability to persist through the health crisis? (Support)
5. How did NJAANG undergraduate students use coping mechanisms to persist through their coursework during the health crisis? (Strategies)

Sampling

Quantitative

The participants were NJAANG undergraduate students who were sought out using respondent driven sampling (RDS) and purposeful sampling. The criteria created for the sample were individual participants who were NJAANG members who served throughout the health crisis for at least two weeks during the 2020 spring semester through the 2021 spring semester. Participants were contacted through respondent driven sampling employing social networks and a scholarship incentive. RDS sampling strategy

is based on participants' social networks and is employed in research seeking participants in hidden populations (Heckathorn, 2011). I also reached out to military student offices at NJ state higher education institutions to identify additional participants. At the conclusion of the quantitative data collection, there were originally 125 respondents, but data cleaning netted 113 usable surveys in the quantitative phase, which satisfied the *a priori* power analysis to detect effect size.

Of the 113 respondents, the following is the breakdown for gender: woman; 54(48%), man; 58(52%), and non-binary; 1(0%). Within those groups the following percentage persisted: 72% of woman respondents, 67% of man respondents, and 0% of non-binary respondents persisted.

Of the 113 respondents, the following is the breakdown for race/ethnicity: Asian; 5 (4%), Black; 18(16%), White; 57(75%), Bi-Racial; 20(18%), Latino; 1(.8%), Hispanic 3 (2%), and other; 8(7%). Within those groups the following percentage persisted: Asian 80%, Black 50%, White 75%, Bi-Racial 75%, Latino 0%, Hispanic 75%, and other 56%.

Of the 113 respondents, the following is the breakdown for age: 19-22; 63(56%), 23-26; 29(26%), 27-30; 11(9%), and 31-36; 10(9%). Within the age groups the following persisted: 19-22; 75%, 23-26; 62%, 27-30; 64%, 31-3; 60%.

Of the 113 respondents, the following is the breakdown for mother's education level representing socioeconomic status: less than high school; 2(1%), high school graduate/GED; 27(24%), technical school; 4(4%), some college; 22(19%), two-year degree; 13(12%), four-year degree; 31(27%), professional degree; 13(12%), and prefer not to disclose; 1(.8%). Within the groupings the following persisted: less than high

school 50%, high school graduate/GED; 74%, technical school 100%, some college 68%, two-year degree 46%, four-year degree 68%, professional degree 85%, and prefer not to disclose 0%.

Qualitative

Thirty-four students volunteered to participate in the interview section of the study. Of the 34 volunteers, 12 participants were included in the qualitative phase. The 12 interview participants were chosen using maximum variation sampling, also known as heterogeneous sampling, to ensure that there was an emphasis on diversity in experience (Creswell & Plano Clark, 2018). Sampling concluded with 12 participants, because the data collection and analysis reached saturation. As repetition of similar codes and themes continually kept appearing, it was decided that saturation was met. Table 1 reports the demographic characteristics of the interview participants. When looking at the general population of the National Guard, The Department of Defense reported in its 2020 Demographics Profile that the part-time components, which the Air and Army National Guard comprises over 50% of, is 78.9% male and 21.1% female (U.S Department, 2020). In comparison, the interview pool is almost a 50% split between man and woman, providing a equal participant pool (U.S Department, 2020). Additionally, the 27.5% reported to be a racial minority, which almost matched the 25% of respondents who stated that they were a part of a minority racial or ethnicity group (U.S Department, 2020).

Table 3*Interview Participant Demographic Table*

Name	Age	Branch	Gender	Race/ Ethnicity	Academic Status
Paula	24	Air National Guard	Woman	White	Persisted
Roma	27	Air National Guard	Woman	White	Persisted
Lauren	24	Army National Guard	Woman	Hispanic	Persisted
Tina	22	Army National Guard	Woman	Biracial	Persisted
Skylar	24	Army National Guard	Woman	Asian	Did Not Persist
Star	21	Army National Guard	Woman	White	Persisted
Rodger	21	Army National Guard	Man	White	Persisted
Rucker	21	Army National Guard	Man	White	Persisted
Austin	23	Army National Guard	Man	White	Persisted
Fred	23	Army National Guard	Man	White	Did Not Persist
Fox	28	Air National Guard	Man	White	Did Not Persist
Tracks	27	Army National Guard	Man	White	Persisted

Data Collection, Analysis, and Integration

Using a follow-up design, the study was split into two phases allowing for the qualitative phase to follow up on significant results from the quantitative phase. To best conceptualize the phases, along with their data integration points, the data collection, analysis, and integration have been separated by each phase.

Phase 1: Quantitative Data Collection

In the follow-up mixed methods design, the quantitative data collection and analysis was initiated through the employment of the adapted CPQ. The CPQ, created by Davidson et al. (2009) was adapted from the 55-item questionnaire targeted for undergraduate first-year students to a 35-item questionnaire ($\alpha = .63 - .81$). The

adapted CPQ consisted of the following selected variables and questions from the CPQ and descriptive statistics variables: academic consciousness (AC), institutional commitment (ISC), degree commitment (DC), supportive services satisfaction (SSS), social integration (SI), and financial situation (FS). Of the original variables from the Davidson et al. (2009) analysis, just seven variables were picked for the study. Variables were chosen based on high significance outcomes from the original CPQ employment in Davidson et al. (2009) with financial situations being added based on the needs of NJAANG undergraduate population. In addition to the Davidson et al. (2009) CPQ variables, descriptive variables were included such as age, gender, race/ethnicity, and economic status. The descriptive variables were chosen based on the first research question.

NJAANG undergraduate students were able to access the survey through a mobile device or computer through a web link via Qualtrics. At the end of the survey, respondents were asked if they wanted to volunteer for the second phase of the study.

Quantitative Data Analysis

Upon conclusion of the survey response period, a binary logistic regression was run to identify which CPQ variables were the most significant in the ability to persist. Additionally, demographic variables were also put through the logistic regression, within block to, to answer research question one and its sub-question counterpart, and to determine which variables best support persistence. The binary logistic regression, run through SPSS software, was used based on the two-part answer to the survey question asking whether a student did or did not persist through the health crisis. A post hoc z-test, logistic regression power analysis was conducted using G*Power, matching the *a priori*

system. The power output (1-B err prob) was .9976227 resulting in a 99.8% power analysis. This concludes that the quantitative phase of study met the power needed and may be generalizable for the NJAANG undergraduate population.

Integration

The first integration point occurred at the conclusion of the quantitative phase of the study. The interview protocol was updated with three questions that further explored areas where the quantitative data analysis lacked information or where further exploration was needed based on the quantitative results. One such question explored the New Jersey National Guard tuition waiver and its influence on persistence for the interview participant. The tuition waiver question was added to the protocol due to the finance variable being omitted in the adapted CPQ. The two additional questions added to the protocol explored persistence prior to the health crisis in order to identify if some challenges throughout the transitions were prior existing or heightened through the multiple transitions.

Phase 2: Qualitative Data Collection

I chose the interview as the qualitative method of data collection based on the importance the interview places on identifying hidden phenomena (Rubin & Rubin, 2012). The interview protocol was designed using a Rubin & Rubin's (2012) 'main branches of a tree' method that breaks the interview in equal segments. The segments of the protocol correlated with Schlossberg's Transition Theory and allowed for further exploration of the Four Ss and the added follow-up quantitative data analysis questions from the integration period (Rubin & Rubin & 2012). For example, each Four S had three questions to ensure an even balance of time within the interview, and three questions

were added from the quantitative phase to assist in integration. To further emphasize the equality of question distribution, the interview protocol employed two main starting questions for each of the four sections of the interview, with probes woven throughout.

Participants were identified through the voluntary list that was generated from the survey data. The twelve participants, sampled from the 34 potentials, were contacted, and confirmed a location and time through email. On the scheduled date, I conducted the interviews via video conferencing application. The interviews lasted approximately 60 minutes, on average.

Qualitative Data Analysis

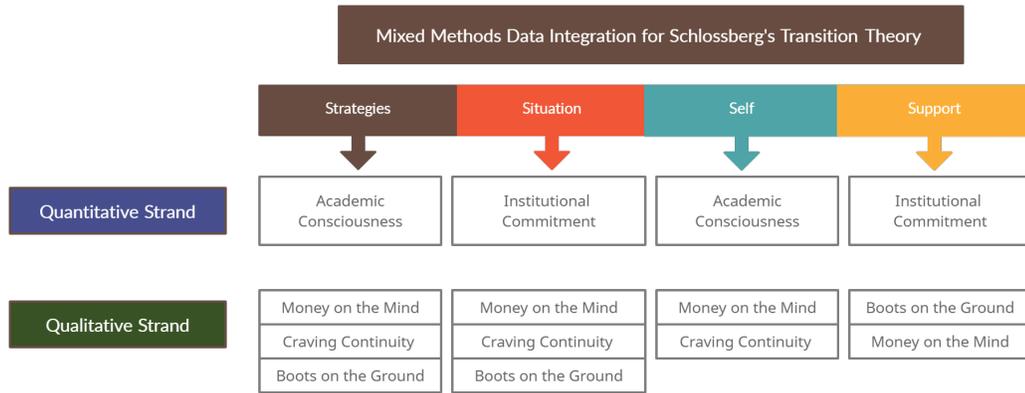
Upon completion of the interviews, the audio files were transcribed and was the catalyst for the coding cycle to begin. This study used a two-cycle coding method in order to have a well-rounded coding process (Creswell & Plano Clark, 2018). The first cycle consisted of concept coding, and then followed by a second cycle of pattern coding. Concept coding captures the main concepts by assigning a word or short phrase to symbolize the overarching or broad meaning of a single item by taking a tangible piece of text and creating it into an idea (Saldaña, 2016). The second cycle used pattern coding where I sought patterns in the concept codes by grouping codes into a smaller number of overall themes (Saldaña, 2016).

Integration

At the completion of Phase 2, the qualitative and quantitative data strands were brought together in order to identify the relationships between the variables of the CPQ, the descriptive statistics variables, and Schlossberg's Transition Theory. The following is a diagram of the results of the quantitative and qualitative data analysis integration:

Figure 6

Second Integration of Data



The integration strands come together to identify the most supported and significant Four S stemming from Schlossberg’s Transition Theory. As seen in Figure 6, the strands of data were applied to all Four Ss, but saturated the strategies and situation categories. In the following section, the findings of the study are further explored.

Integrated Results and Findings

The data analysis identified that NJAANG undergraduate students need heightened attention to the “situations” and “strategies” quadrants of Schlossberg’s (2011) Transition Theory to best support academic persistence through transitions. The quantitative data studied the relationships between the variables of the CPQ (AC, ISC, SSS, DC) and the descriptive variables (age, race/ethnicity, and gender) for NJAANG undergraduate students who were enrolled in undergraduate work on and through the 2020-2021 Spring semester. The qualitative data investigated the four sectors of Schlossberg’s Transition theory, in addition to following-up on the quantitative data

analysis, identify emerging themes in the data that supported or hindered academic persistence throughout the heightened transitional periods of the health crisis. The data were used to best understand the impacts to academic persistence through transitions for the NJAANG undergraduate population.

Quantitative Results

Table 4

Binary Logistic Regression

	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for Upper	95% C.I. for Upper
Step 1a								
AI	-.112	0.08	1.971	1	.160	.894	.765	1.045
ISC	.131	.055	5.728	1	.017	1.140	1.024	1.270
SI	.048	.068	.497	1	.481	1.049	.918	1.199
SSS	.044	.064	.473	1	.491	1.045	.922	1.184
AC	1.56	.069	5.052	1	.025	1.169	1.020	1.339
FS	.069	.059	1.362	1	.243	1.071	.954	1.202
DC	.017	.043	.146	1	.702	1.017	.934	1.106
Constant	-3.247	1.644	3.965	1	.046	.038		

a. Variable(s) entered on step 1: AI, ISC, SI, SSS, AC, FS, DC

The output to the binary logistic regression, as seen in Table 3, identified that two variables from the CPQ were significant to academic persistence for the NJAANG undergraduate population. The two were academic consciousness (AC) and institutional commitment (ISC). A variable is found to be significant in a binary logistic regression when the p-value score, also represented as ‘sig’ on Table 4, is < .05 (Menard, 2010).

With AC having a p-value of .025 and ISC having a p-value of .017 both variables are determined to have significance. Additionally, the Exp(B) score correlates with the higher the number the more likely a student is to persist. When looking at Figure 1, both AC (1.169) and ISC (1.140) have the highest output for the Exp(B). This further suggests that these two variables have the strongest impact on persistence for the NJAANG undergraduate students responding to the survey out of all of the variables in the adapted CPQ.

Table 5

Block Two Inclusion with the Binary Logistic Regression

	B	S.E.	Wald	df	Exp(B)	Sig.
Step 1a						
AI	-.144	0.84	2.976	1	.866	.085
ISC	.157	.060	6.896	1	1.170	.009
SI	.057	.071	.646	1	1.059	.422
SSS	.061	.065	.886	1	1.063	.346
AC	1.49	.071	4.336	1	1.160	.037
FS	.065	.060	1.199	1	1.067	.274
DC	.022	.045	246	1	1.023	.620
Race	-.031	.069	.199	1	.970	.656
Socio	.191	.150	1.622	1	1.211	.203
Gender	-.302	.506	.356	1	.739	.551
Age	-.054	.066	.680	1	.947	.409
Constant	-2.248	2.725	.680	1	.106	.409

a. Variable(s) entered on step 1: Race, Socioeconomic, Gender, Age.

Upon review of the full binary logistic regression, the analysis outputted a prediction rate, or the ability to predict an outcome of a variable, at 74% that a NJAANG undergraduate student would persist. The Naglekerke R Square analysis yielded a 24% chance of persistence, with a moderate effect size. The classification percentage was 76.9%, about 6% higher than the predictability percentage. Overall, the high rate of predictability is a delimitation, because it can be predicted that NJAANG undergraduate students will persist more than they will not. Following the binary logistic regression analysis related to the adapted CPQ, a block two analysis using the demographic variables was conducted (see Table 5). When viewing the block two output, all demographic variables yielded a p-value of $>.05$ resulting in non-significant relationships to the demographic variables.

Qualitative Findings

The research questions in the qualitative strand investigated how the Four Ss of Schlossberg's (2011) Transition Theory influenced academic persistence for NJAANG undergraduate students through the multiple transitions of the health crisis, in addition to following up on the survey results. Through the analysis of the data, three themes encapsulated the persistence of the NJAANG undergraduate students throughout the transition periods of the health crisis.

Boots on the Ground

Boots on the ground captures the military slogan of deploying troops to address a situation. For the study, this term is used in reference to providing multi-dimensional support, physically, mentally, and emotionally while NJAANG students are transitioning through crisis. The students interviewed expressed that multifaceted support was pivotal

to their ability to persist through the health crisis. While faculty support was emphasized as important to their ability to academically persist, the NJAANG undergraduate students had to advocate for their resources to their professors to facilitate the understanding of their unique experiences. This facilitated the emergence of two sub themes, battle buddy and missing in action, both which materialized as the most influential aspects of multidimensional support for persistence among participants.

Faculty as Battle Buddies. Battle buddy refers to the United State Army term for a paired set of soldiers that are there for each other and confide in each other to improve safety. This theme pertains to the importance of having faculty and staff on campus with military backgrounds and how NJAANG students have to advocate for themselves when working with non-military faculty and staff. Just like military battle buddies, when NJAANG undergraduate students expressed that they needed to inform their “professors on what [they] needed” and self advocate or find a teacher with military experience who was able to “understand [their] struggles.” Battle buddies work with each other to build their relationships, and NJAANG students emphasized that relationship building between students and non-military faculty not only established a feeling of investment, but also mitigated stress by increasing awareness and “understanding around the responsibilities” and unique experiences of the NJAANG undergraduate population. As such, participants expressed that a perceived lack of this awareness and understanding created a heightened sense of anxiety, stress, and worthlessness. Participants provided an overview of the challenges with non-understanding faculty members and benefits of understanding faculty members:

And nine times out of ten, most professors will work with you and understand. But that one, one out of 10, always at least one course, or two courses a semester, I'd say. There's that one professor that doesn't understand and doesn't know, or may not be properly informed on what to do when we're on orders. So they automatically started saying, oh, you're missing work, zero. And then say, 'oh, you know, you're late. This is late. I'm not accepting it.' And stuff like that. I mean, I understand like they're teaching a lot of students. So, I mean, it can be that they can forget. And so it's, it's hard to do what you got to do on orders and stay on top of making sure your professors know what to do. Which is something I think the Veterans Affairs Office should do a little bit more than again, although overworked and underfunded, I bet. (Rucker)

I mean, my Arabic professor, I took a few classes in Arabic, so I've been with him for a really long time. Now, throughout my whole college experience, he does have some military experience where he was a translator on a military base. So, he kind of knew what was going on. And he'd always be like, 'hey, if you're out on drill, just let me know.' I'm like 'okay, not gonna be in class,' but he was super excited to help and things like that. (Star)

As Rucker noted, this lack of investment made the NJAANG undergraduate students rely on themselves to advocate and the few faculty members they connected with from other offices to advocate to feel understood, valued, and worthy. In contrast, Star felt seen by the professor that had a military background, which created a connection and instilled trust that military service would be valued rather than penalized. Participants suggested

that faculty and staff who misunderstand the NJAANG population tend to generalize them into the traditional or non-traditional student population, which causes them to feel ostracized and strains academic persistence.

Military Student Offices Missing in Action (M.I.A). Missing in action is the military term for when a member of the military is unaccounted for or when the whereabouts of the member is unknown. While military student offices were mentioned by NJAANG students as helpful for military administrative processing, many students spoke to the challenge this office had regarding “struggling with communication” to faculty and other departments on NJAANG student’s needs. Often, the military office was ‘missing in action’ and could not “understand certain military student policies” which added to the difficulty in which they “rarely communicated” the proper needs and procedures for this student population to the faculty and staff. Students emphasized that this military office was “hard to reach” and sometimes “frustrating to work with.” The lack of communication from the military student offices to the professors and other departments caused many inconsistencies in resources. Skylar explained how the inability to receive academic resources while being on orders caused her to not academically persist:

If I'm being honest, I'm still honestly trying to figure it[the denial of being able to continue classes] out. According to them[the higher education institution], it's rules from the Office of the Provost. So, it's something they can't let me get by with even though it's military... So my school is online for two weeks right now. And because I'm in constant contact with, you know, COVID, I asked if I could extend that with my professors from the dean. And they told me no, because that's

against their rules. And, you know, at that point, I can't I couldn't do anything. So I had to remove my schedule, and maintain registration instead of taking classes over there. (Skylar)

Informed by the office of the provost that she was unable to continue in school because of her inability to be present for her classes throughout her military commitment, Skylar was unable to academically persist. Throughout the interview, she stated that she was “continually confused” because she would have been in full contact with her professors and had the ability to continue online with the rest of the class. While others interviewed did not share the exact same experience, almost all had situations in which the military student offices continued to be ‘missing in action’ as NJAANG members needed to rely on themselves to “find the policy” or have to explain the policy. One student had to find a policy himself, because “they had never heard of it” and were not aware that he was able to use it based on his type of military activation. The students expressed that they were “frustrated” and that it “caused more stress” as they went through their multiple different transitions of the health crisis.

Money on the Mind

For the second theme, “money on the mind,” financial worries and strain were mentioned by all interview participants and encompassed job losses, both theirs and that of their family members, stemming from the health crisis. They described that the consistent uncertainty and foreboding surrounding the stability of income throughout the health crisis created an anxiousness about how and if military funding would be continued and whether or not they would be able to afford to continue their education.

This anxiousness and hyper focus on finances caused the following two sub themes to emerge: financial foreboding and academic accessibility.

Financial Foreboding. Participants spoke to the instability of financial situations: some lost their jobs; some were unable to obtain their unemployment benefits; and some were overwrought with the thought of not being able to provide for their families. Most participants noted that they took on military activations to compensate for job loss or to get ahead financially.

Because, like I said, I was furloughed, and then it came back and then I got laid off. And then well, I can't even get unemployment with veterans. So my guard unit, pulled some strings and pulled some [staffing] days out of nowhere and [activate me] all summer while I looked for a new job. And it was not a fun time, as far as my mental health was concerned. I mean, there was days where it's like, 'how am I going to pay the bills? 'You know, I just had bought this house. And now all of a sudden, I have no job, and how am I gonna pay for [school]? (Fox)

Honestly...it was both good and bad, because people were getting sick, ... and I was worried about how I'm going to pay for college, like, how many loans am I going to take out, and then it just happens that the mission started. And the military calls me one day at 9 am in the morning, and they're like, 'oh, we need you down by 12 pm'.... and they were like, 'yeah, you might be gone for two weeks.' I was going for four months. And thankfully, like the pay was good....but I missed out on classes. (Lauren)

While attempting to juggle their military careers and academic responsibilities, the loss of money and financial ability often took precedence, with some students expressing that they opted to stop their education in order to be paid for their military service. As Lauren noted, she was activated by the military and it released the burden of financial foreboding, even with the surmounted stresses to her academic persistence such as being “...the only medic assigned to the [military] group” and the lack of time stemming from her obligations. Despite escaping financial foreboding, it caused further stress to her persistence that Lauren was able to ultimately overcome. Fox succumbed to the pressure of financial foreboding and did not persist because he had to prioritize the military activities in order to support his family. In both cases, financial foreboding took precedence, and students expressed that if there was opportunity after prioritizing their financial need, that decisions to academically persist then they would continue to pursue their academics.

Students in No Man's Land. No man's land is the military term for the area of land between two opposing militaries on the battlefield. Regarding the research, all participants spoke to the importance and reliability of the military academic funding opportunities such as the Montgomery GI Bill and New Jersey National Guard Tuition Waiver while they were transitioning through the health crisis. The availability of and access to military academic funding streams was emphasized throughout the interviews as imperative to support academic persistence. Exploring further, all surmised that military funding was a main factor for providing access to higher education and that it may have been impossible to pursue higher education without it.

Well, being in the NJ National Guard is crazy. They, I know other guard units don't pay 100% tuition like Jersey does. So they did pay 100% of my tuition for the entire time I was in school, um, which we're still like, had to pay for fees in our books and stuff. But tuition was a huge help. So financially, the military and the guard like, they have helped me out so much, because now I have my degree completely debt free, like school loan free, I don't have any school loans, I don't owe them any money, which is like a huge relief. (Tina)

The ability to have funding opportunities that paid for higher education tuition, and additional benefits to cover other costs, allowed some interview participants to be able to obtain a college education despite job loss and other factors stemming from the health crisis. Students spoke to the importance of policy change to the Montgomery GI Bill to include online education. Despite the changes in policy, some of the procedural aspects of the funding avenues throughout the health crisis continued to provide added stress to academic persistence, as students spoke to the limitations with the New Jersey National Guard tuition waiver, and where inequity played a roll.

It (NJ Tuition Waiver) actually messed me up the first time because I didn't know that before you get the National Guard waiver, you have to do your tuition and FASFA. And then you have to, on top of that, they count scholarships. So, with the FASFA and scholarships, I had enough to pay for tuition, but not enough to pay for room and board and fees. And the Guard was like, 'oh, yeah, we can't give you money because you already paid off tuition, which is the FASFA and the scholarship.' So I was left to

pay like 66K out of pocket. Just because the National Guard tuition waiver did not pay for anything. (Lauren)

The participants who were thought to have been awarded greater economic benefits through the FASFA, were then limited in their use for the NJ National Guard tuition waiver and thrown into ‘no man’s land’. The strict funding policy regulated the application of the tuition waiver funds solely to tuition coverage and caused further challenges to academic persistence outside of tuition financial strains. Additionally, this restrictive funding avenue not only was an issue regarding the actual receipt of the tuition reimbursement, but students emphasized that they were panicked that their change in status as a student due to their military activations would impact their ability to be in attendance for classes and receive funding. This stress on how to pay for their “room and board and fees that the National Guard tuition waiver did not cover” resulted in “freaking out and stressing a lot.” What was designed as a benefit for serving was expressed as a “benefit for some but continually disappointing” for others.

Craving Continuity

A prominent message throughout the interviews, the third theme surrounds the expressed want or need for continuity through the different transitions occurring throughout the health crisis. The participants expressed struggling with varying military and civilian schedules, the multiple changes in the class environment, and the lack of consistent communication in both military and civilian sectors. Emerging as sub themes, the schedule discontinuity and environmental chaos influenced students’ ability to have a stable learning environment and schedule.

Environmental Chaos. The participants emphasized their lack of consistent study environments throughout the transitions between military and academic work. While the participants attempted to study in the chaotic environment, they were exposed to trauma and battled consistent interruptions.

I'd be literally sitting in the tent with a Tyvek suit, taking a quiz or studying or like doing coursework. And then I you know, some would pop in and be like, "Hey, we got a delivery" and I'd be like, "Alright, laptop down." You know, bring a body from one place to another and then go right back to my coursework, and it's just strange sitting back down.

Imagine taking your quiz and your hotspot cuts out. And it's like, 'oh congratulations, you just failed your quiz.' So, there's a lot of technical difficulties that made it harder... (Rodger)

Despite attempting to complete their coursework, NJAANG undergraduate students explained that their conditions were never stable and the experiences they witnessed impacted them. Students described that continually changing hotels, changing activation locations, and changing work shifts caused disruptions. Austin spoke to this that "...everything changes every day for no reason. And you'll be working an eight hour shift one day, and a 12 hour shift the next. You never really get the same schedule, and everything's always adjusting." The higher education institution did not "ever ask about the experiences [the student] faced" and some students mentioned that military student

offices never checked-in with them on how they were coping throughout the activations and crisis.

Schedule Discontinuity. NJAANG students stressed that the turbulent schedules of the military, the continuous changes in education, and the ever-changing policy and procedures stemming from the health crisis influenced their ability to persist through coursework. As all the transitions occurred, interview participants spoke of the specific challenges coordinating their academic schedules within their military duty. Schedules were unstable and NJAANG students were unable to grasp a study pattern to cope and lessen stress on persistence. Star spoke to completing work while on duty:

Um, so during the height of the pandemic... I was fortunate enough with the other members to be put on like a gate guard duty so we just kind of sat in a Humvee at an intersection for like hours. And during that time, I'd have VPN. So I could just do my homework in the Humvee and call it a day. But it got frustrating, especially when we had to run missions, because I would just sit in the truck and try to do homework while flights were going out and tracking the flight and stuff like that.

Participants spoke to the matter of transferring to the online schedule as “hard” or “severely difficult” to adhere to the requirements and complete their military assignments. Some students were unable to commit to office hours, tutoring hours, and mandatory online lectures because their shifts were changing daily or weekly. Tina spoke to the situation in which she was told by the military to go and be medically evaluated to start an activation, proceeded to make a completely new set of arrangements with her professor to accommodate her schedule, only to be informed ten hours later she was not

going on the military activation. Mentioned by all students, the sudden and unpredictable changes in schedule and logistics made them unable to fully commit to their academics based on the weight of the impending transitional chaos of the health crisis and their military obligations.

While there were negative impacts to schedule continuity because of transitioning online, there were also positives. For example, by going online allowed NJAANG students to be “involved” and “included” despite missing class and not being there for their virtual instruction. Additionally, faculty and staff were able to “leave notes” and “send emails when the internet was available” for students to access around the clock that the students mentioned as supportive for continuity. However, if a conflicting schedule limited the ability to get onto the virtual classroom for long periods, NJAANG students were left to try and “bend schedules” or seek agreements with each faculty member to accommodate.

Discussion

The findings from this study demonstrate how academic persistence was impacted through the multiple transitions of the health crisis for the NJAANG undergraduate population. For this student population, the importance of flexible policy and procedures, the ability to obtain and stay connected to resources, and maintaining and investing in relationships is essential for academic persistence throughout periods of crisis. This study sought to answer:

To what extent did NJAANG undergraduate students who served through the COVID-19 health crisis persist within the higher education system? Does persistence differ based on race, gender, age, or socioeconomic status?

Based on the survey data, and binomial logistic regression, more NJAANG undergraduate students persisted than did not persist. Additionally, persistence based on race, gender, age, and socioeconomic status was not found to be significant within the binomial logistic regression. What is notable is that despite a majority of NJAANG undergraduate students being able to persist, all persisted in different ways. Some utilized a policy to finish courses immediately upon activation, some persisted by completing courses after activations, and others took advantage of other resources to finish courses in accordance with the typical undergraduate student. While previous literature focused on how traditional and non-traditional students academically persisted through crisis (Ethington & Smart, 1986; Hanauer et al., 2017; Wardley et al., 2012), this study identified areas specifically impacting persistence for the National Guard student population.

When responding to the survey tool used, the CPQ, academic consciousness and institutional commitment were the most significant variables impacting persistence. Academic consciousness refers to a student's ability to submit assignments in a timely manner and be attentive and present in class, while institutional commitment is the ability to feel connected and invested to their higher education institution. The results from the research confirms the importance of academic resource availability, as suggested by Brown & Gross (2012), but builds upon this research by revealing the importance of having programs, resources, and financial support specifically for the National Guard student.

Situation

The timing of the health crisis for the NJAANG undergraduate students was a challenge for most of the students interviewed. Stemming from the simultaneous environmental transitions, there were many areas of Schlossberg's Transition Theory that were being tested based on the needs of their civilian, military, and academic environments. Having to deal with everything at once, including improper communication channels between the higher education institution, faculty, and NJAANG undergraduate students exacerbated the heightened tension on the Four S structure. This confirms research by Gilbert & Griffin (2015) who found that communication for the military student, and specifically the National Guard population, is imperative through the multiple transitions in and out of the academic environment in order to maintain relationships and feel connected to the academic environment. Further expanding on Gilbert & Griffin (2015), this study identified that National Guard students are often attempting to navigate the bureaucratic nature of higher education and seek answers through military channels and consistent inquiry around the institution based on the lack of communication from faculty and staff.

Military students' offices were continually mentioned as areas that caused frustration and confusion during transitional periods. Despite Hamrick & Rumann (2013) identifying the importance of military student offices providing assistance and awareness of the military student population, this study reveals the lack of investment of these offices at times to fulfill these recommendations. As a result, students are left to educate others within their academic setting on who they are and advocate for their needs. Military student offices have long been areas burdened with bureaucratic processes.

While these offices focus on completing administrative essentials including financial and academic benefits for students, students are left to carry the mission of educating the institution on their needs and applicable policies alone. This task creates more stress on students, triggering a need for support during their multiple transitions.

Self

As explained by Molina and Morse (2017), the National Guard population is diverse regarding age, race, and life situation. This is true for the NJAANG undergraduate population in this study as they hailed from different parts of the state and from different life situations. Some were married, some had kids, and some were young and just looking to build for their future. While previous literature has explored how age and time in the classroom of older military members positively influence persistence (Wheeler, 2012), this study explored a variety of demographics and factors of persistence. Advancing the research in this area, this study uncovered how demographic differences influence motivational factors for persistence, exemplifying how important it is to further investigate this population beyond this study. Despite varying situations, ages, and life experiences, and some motivational differences for persistence, there was a common theme of internal motivation found to be significant with this population. For many of these students, their internal motivation to graduate and complete their degree was notable as one of the main reasons they were able to persist.

Support

While student-to-student relationships are important factors in social support for the NJAANG undergraduate population, support from faculty is of equal or greater value (Blaauw-Hara, 2016). Blaauw-Hara (2016) emphasizes the importance of identification

of faculty and staff members with whom military students can build relationships throughout transitions. However, this study contributes to this research by revealing barriers to this recommendation. One such barrier is disrupted connection between the student and faculty that comes as a result of inadequate and strained systems of communication. For example, Rucker was continually frustrated with his communication between himself and his professors because of the continued variances in expectations. This is an additional strain to already existing communication challenges and results in increased stress and hinders the establishment of meaningful relationships between students and faculty. Building upon Blaauw-Hara's (2016) work, this study found that such disruptions to relationship building stifled student motivation for persistence because they felt a lack of investment in their needs from the institution.

Another barrier to developing relationships between faculty and students is trust that investment matters. For example, in "Battle Buddy" the students expressed that when their professors were less aware of who they were and their experiences it created anxiety and stress. NJAANG undergraduate students are emphasizing these in depth "battle buddy" relationships in the military, and are then seeking them within the higher education environment. Student's have to advocate for themselves, but there is a level of trust that is needed from the relationship between the professor and student relationship to ease the strain on persistence. When this trust is built through continued investment, NJAANG students, such as Star, felt seen, understood, and trusted. While professors have some part in this discussion, the military student offices are the central focus to this issue. With the military student offices unable to stray from being administrative hubs, there is a lack of informative information and education that adds more to the complexity of

relationship building without the support and backing of the military student office spreading awareness.

Strategies

Coping mechanisms expressed by the NJAANG undergraduate students resided in the use of military student policies and time management. In specific, time extensions, assignment adaptations, and military student course completion policies aided in their ability to persist. All students expressed that policy impacted their persistence in some way, and noted that there were many issues when employing adaptations enveloped in military student-oriented policies. While Federal Executive Order No. 13,607 (2012) supplemented the educational information given to military students, by providing mandates for higher education institution to contact for financial services, enrollment, and mandatory reinstate procedures for temporary military service, it does not mandate the communication lines between the higher education instructions to the faculty and cross organizations. This creates a barrier to up-to-date information and implementation of state policy that is crucial for NJAANG undergraduate members. One student found out about a policy through their military leadership while they were on orders. When the student attempted to inform their military office coordinator about the policy, they were unaware. The student, at the activation location, had to send over the documentation that the policy was a state and federal mandate. As a crucial part of academic persistence, military student offices and higher educational institutions need to be informed and aware of updated policies for the AANG student population.

Conclusion

NJAANG undergraduate students on New Jersey higher education campuses are left with the strenuous task of attempting to academically persist while managing civilian, military, academic, and environmental transitions. The inability for NJAANG students to obtain proper resources, feel heard based on their transitional needs, maintain continuity amongst schedules, mitigate financial or academic funding foreboding, and feel understood has strained their ability to academically persist. This means that NJAANG undergraduate students must accept generalized information and a lack of true understanding from their higher educational stakeholders. However, given the shining of strategies and situation sections of Schlossberg's Transition Theory, higher education institutions can further expand in research, professional education, and policy. However, one can be skeptical on whether the academic persistence of their National Guard student body is of importance despite their civil service. The door to further research has been opened, the opportunity awaits.

Chapter 6

Doing a Disservice to Service Students:

Air and Army National Guard Undergraduate Students, Higher Education, and Crisis

When the nation faced one of the most pivotal crisis moments in recent history, the COVID-19 pandemic, disruptions to daily life were abundant. Everyone in the United States struggled to manage multiple transitions, like switching to virtual work or school platforms while maintaining familial obligations. For the students of our Air and Army National Guard (AANG) such transitions have always been, and will always be, the “norm.” AANG students have state activations, federal deployments, and annual training that pulls them for varying lengths of time from classes throughout their collegiate career. Yet, despite the chaos these transitions create in their academic lives, most AANG students persist in obtaining their degrees.

During my own time as a graduate student, and a member of the AANG, I was activated to serve our nation during the COVID-19 pandemic. As I sat in a field medical station, covered from head to toe in protective gear, I completed assignments, between bouts of caring for the ill and dying, and wondered how undergraduate students with less experience than myself persist in school. And more importantly, how do our institutions of higher education help AANG students through this process? After completing a mixed methods study on such questions for my dissertation, with a focus on AANG students enrolled in New Jersey colleges and universities, I discovered that much of AANG student experiences with persistence is intrinsically motivated and that universities can be doing much more to support service student success. Below, I’ve outlined the two main

factors, that I discovered through research, that negatively impact AANG student persistence. Additionally, I've noted ways in which universities are missing the mark in their support of National Guard undergraduate students and offer suggestions for improvement. First things first, though, let's understand a bit more about this population.

Who Are AANG Students?

Across the United States, about 31,898 AANG undergraduate students attend higher education institutions (Molina & Morse, 2017). Despite only being .1% of the entire undergraduate student body, and 2.8 % military student population, AANG students have the highest military student population at public two and four year higher education institutions nationwide (Molina & Morse, 2017). About 86% of AANG students attend higher education institutions in their home state, which is a 9-41% difference in comparison to the other military student populations (Molina and Morse, 2017). AANG students differ greatly from active duty, veteran, and civilian higher education peers. The National Guard is unique in that they have operations beyond their state projects. An operation is a coordinated military action, and AANG students can be tasked with both federal or state activations and deployments aimed to assist in the operations affecting the nation (Listman & Doubler, 2007). The time commitment for a traditional National Guard member is approximately two days out of the month and two weeks of annual training at a minimum (Doubler, 2003). National Guard members can be activated for federal or state operations with little to no notice and for unknown periods (Doubler, 2003; Foot, 2020). Because of this unpredictability, AANG undergraduate students are forced to balance their educational and military responsibilities concurrently.

The unpredictability and challenges that come with a commitment to the National Guard can distract students from re enrollment and persistence in undergraduate programs.

Impact #1: An Unstable and Uncaring Environment

The first factor impacting persistence, unique to the AANG student population, is that their study environments are ever changing. Given that military schedules are changeable and internet accessibility is inconsistent, the AANG student's academic environment is never fully settled throughout an activation period. For example, the students I interviewed mentioned trying to study in Humvees while others were working on classwork in between putting on hazmat suits while awaiting the transportation of body bags. Not only are the study conditions disruptive and unstable, but AANG students continually transition between military and civilian environments as activations and deployments continually get assigned. This was especially challenging during the COVID-19 pandemic as the academic experience in military and civilian settings differed greatly such as in the availability of academic resources, the study environment, and accessibility to in class peers and professors.

The AANG undergraduate students interviewed emphasized that these differences between civilian and military environments were "to blame" for their struggle with coursework throughout their transitions. Despite classes being online, they were unable to consistently attend class and complete assignments. Procedures and policies for assignment adaptations, time extensions, and overall academic support varied both within and between higher educational institutions. For example, professors within the same department at one institution were extending different academic resources and supports to the AANG students. Some professors provided an alternate assignment, alternate online

materials, assignment extensions, and more, while others extended little to no academic support. In this case, students had no idea what to expect; the services they received varied from professor to professor mimicking the chaos in their environment. Without policies and practices that are consistent, and tailored to this population, we are letting the environment dictate the success of the AANG student.

Aside from the literal ways the environment for AANG students is chaotic and unstable, the lack of consistent and meaningful communication from the academic institution adds to this uncertainty and turmoil. Throughout the COVID-19 health crisis, stakeholders, military student offices, and professors were “missing in action” for AANG students, resulting in broken communication channels and students’ feelings of invisibility. Students interviewed described difficulty scheduling assessments with their professors as they continued to be held to the same standard as the other students in class or unable to obtain the resources needed to facilitate persistence. For example, students expressed trouble with instructors not being available when students were free of their military duties, while some faculty members completely failed to respond to emails requesting assignment and resource support. The communication needs of this population is not a new phenomenon; the National Guard student population relies on communication pathways to succeed (Gilbert & Griffin, 2015). Yet, students continue to emphasize that faculty are unaware or resistant to their specific communication needs, resulting in greater barriers to persistence. The unstable, uncertain, and uncaring academic environment plays a major role in the ability for the AANG undergraduate student population to persist.

Solution #1: Increasing Policy Awareness

The hectic, disruptive military and civilian environments weigh on this population, leaving them to rely on academic policies and procedures created for other student population groups. To help address the unstable environment, higher education institutions can update their policies and procedures to specifically address the needs of AANG students and improve communication practices. One way to do this is to include the military student office, faculty, advisors, and representatives from offices around campus to promote cross-organizational communication and investment in AANG student success. DiRamio et al. (2008) noted the guided administrative procedures are vital for the academic success of National Guard students. Guided administrative procedures can include mentoring, task lists, communication pathways and policies, and support personnel. By implementing stable communication lines and updated policies, the AANG undergraduate student population is no longer an afterthought and can rest assured that they are seen and valued throughout the transitional process.

In addition to creating these policies and practices, it is crucial to ensure that faculty and staff are updated and informed on such changes. It is irresponsible to implement policy changes and keep them unknown. An online professional development pertaining to these veteran student policies and practices, similar to the ones faculty and staff take on diversity, equity, and inclusion, would ensure that this information becomes institutional knowledge. The training should target updates on federal, state, and institutional policy related to this population, along with encouraging practices that improve communication pathways between students and faculty. Here are but a few of the policies universities can publicize:

- 34 Code of Federal Regulations (C.F.R) Section 668.18, the law is codified under 20 United States Code (U.S.C) under 1091C: C.F.R 668.18 focuses on re enrollment and the policies that higher education institutions must follow to re-enroll military students. For National Guard students, there is a disclaimer that speaks to the situations and scenarios of when the re enrollment policies can be used.
- Executive Order (E.O) 13607—Establishing Principles of Excellence for Educational Institutions Serving Service Members, Veterans, Spouses, and Other Family Members: E.O 13607 speaks to the services that higher education institutions must provide to military students, including specific National Guard student information, in order to receive federal funding.

While there are important federal policies that National Guard members are often unaware of, some of the most critical policies are the ones implemented by the state legislatures. I spent six years serving in the National Guard while enrolled in graduate school, yet was not informed of many of these state-specific policies. The lack of communication on the existing policies also resonated with the students interviewed, with one student explaining that “it was my supervisor who told me about the policy while I was on my overnight shift at [activation location].” Below are a few state-specific policies in states with high AANG enrollment (New Jersey, Texas, and California):

- 2013 NJ.R.S Title 18A - Education: Section 18A:62-4.3 - Student at Public Institution of Higher education, Re Enrollment Right, Refund of Fees if Called to Active Duty for Certain Military Operations.

- Texas Statute (T.S) - Education Code: Title 3 Subtitle A: Chapter 51.9111:
Excused Absence for Military Service
- California Education Code § 99130 and Section 824 of the Military and
Veterans Code

By empowering faculty and staff with this information, they will become valuable resources and advocates for this population throughout AANG student transitional periods and encourage investment rather than institutional neglect. Additionally, this allows faculty, the military student office, and advisors to appropriately guide students before, throughout, and after transitions between the military and civilian environments, potentially reinforcing cultural changes that increase awareness of the distinct needs of AANG undergraduate students.

Impact #2: The Bureaucratic Burden

The second major issue facing the AANG undergraduate student population is that they are constrained by the bureaucratic structure and processes of higher education. The numerous administrative steps that an AANG student must navigate due to their transition process causes confusion and frustration. For example, AANG students explained that in order to transition in and out of their higher education institutions they had to ensure that the following offices were contacted: the financial aid office, the admissions office, the military student office, each individual professor, their advisor, their academic department, and other offices dependent on the requirements of the institution. Additionally, AANG students are expected to take these steps independently, creating other barriers to persistence. According to participants, when AANG students did attempt to rely on the institution's military offices for resources, they were met with

incorrect or out of date information. This reinforced feelings of isolation and neglect, as well as distrust in the university.

AANG students explained that professors, financial office staff, and military student office staff were often unaware of academic procedure and policy, causing further stress to the system and frustration with the process. One student highlighted this when discussing an interaction with his military student office during an activation. He explained that his military leadership informed him of a state policy that assisted AANG students that had important implications for grading practices during activation, of which his university military service office was unaware. Another student expressed a similar frustration: “if all the professors don't, like, understand [this policy]... they'll put zeros in and then essentially you fail the class.” The bureaucratic trickle down structure leaves AANG students with policy that is created at the top and is rarely communicated properly at the ground level. Higher education institutions, and accompanying military student offices, must recognize the grave impact this has on this student population.

Higher education institutions abide by the structure and procedure of the bureaucratic process to ensure that there is order and organization, but with military student offices often stressed from these administrative processes, AANG students are the ones left stranded. AANG students expressed that there was not only an issue with processing times from military student offices, but that when there was an issue or inequity with a policy or procedure it was often ignored. For example, students expressed that the New Jersey National Guard Tuition Waiver (tuition waiver) was confusing and misleading. The tuition waiver can only be used by AANG students who had tuition costs not covered by FASFA. By not being able to apply the tuition waiver to books, food, and

housing has left lower socioeconomic AANG students in desperate need of loans and other funding avenues to persist. Raising equity issues, students who faced this challenge were told by their military student departments that there was nothing that could be done. The bureaucratic organization of role specific offices is ideal but not supportive or attentive of bottom level issues that are particular to AANG students.

Solution #2: Persisting Beyond Bureaucracy

In order to find a solution to the flaws of the bureaucratic process, higher education institutions need to strengthen their relationship with the AANG undergraduate student body. Military student offices are often created with the focus of processing federal and state military academic funding which is consistent with the bureaucratic principles of assigned roles and organization. Therefore, military student offices focus on the paperwork needed to be completed for and by AANG students, rather than seeing them as college students too, often causing them to feel like an administrative burden. Establishing a location that not only focuses on the administrative aspect of the AANG student, but the holistic needs of this population, is a crucial resource to strengthen persistence through their transitions. Additionally, this empowers this student population to advocate and express their needs throughout the transitional process to a mentor or liaison at the military student office with whom they are familiar. The military student office then becomes a powerful support for the process of learning and informing throughout AANG undergraduate student's multiple transitions.

Additionally, military student offices should conduct a review and ensure that they are not generalizing and applying activity duty policies to AANG students. What separates this population from other military student populations is that they are

continually transitioning between civilian and military environments. There needs to be accountability on behalf of the military student service office to create a check-in process with the AANG student during their transition into, throughout, and beyond the classroom. Moreover, higher education institutions should take action to implement a check-in process to ensure that resources, adaptations, policies, and procedures are being adequately implemented. When items on the checklist are not being addressed, the military student office should advocate on behalf of the student so that there is one less responsibility on the student throughout the transition process.

Conclusion

During times of crisis, AANG undergraduate students step up and serve their state and country, yet are often done a disservice by their higher education institutions throughout the process. For far too long, this student population has been forced to rely on generic military student policies and procedures and expected to be successful. To address the problem, it is crucial that higher education institutions take action now to provide resources, updated policy, and review the purpose and mission of their military student offices in order to spearhead change. The reality of change lies in whether higher education institutions want to make this issue a priority. This requires us to ask: at what point will we find value in serving those who serve?

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Appendix A

College Persistence Questionnaire Items

Factor 1: Academic Integration

1. On average across all your courses, how interested are you in the things that are being said during class discussions?
 - very interested / somewhat interested / neutral / somewhat disinterested / very disinterested / not applicable
2. In general, how satisfied are you with the quality of instruction you are receiving here?
 - very satisfied / somewhat satisfied / neutral / somewhat dissatisfied / very dissatisfied / not applicable
3. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?
 - very well / well / neutral / not well / not at all well / not applicable
4. How satisfied are you with the extent of your intellectual growth and interest in ideas since coming here?
 - very satisfied / somewhat satisfied / neutral / somewhat dissatisfied / very dissatisfied / not applicable
5. How much of a connection do you see between what you are learning here and your future career possibilities?
 - very much / much / some / little / very little / not applicable

Factor 2: Financial Strain

6. How often do you worry about having enough money to meet your needs?

- very often / somewhat often / sometimes / rarely / very rarely / not applicable
7. How difficult is it for you or your family to be able to handle college costs?
- very difficult / somewhat difficult / neutral / somewhat easy / very easy / not applicable
8. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?
- a. very often / somewhat often / sometimes / rarely / very rarely / not applicable
9. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?
- a. very large strain / somewhat of a strain / neutral / a little strain / hardly any strain at all / not applicable

Factor 2: Institutional Commitment

10. How confident are you that this is the right college or university for you?
- a. very confident / somewhat confident / neutral / somewhat unconfident / very unconfident / not applicable
11. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?
- a. a lot of thought / some thought / neutral / little thought / very little thought / not applicable
12. How likely is it that you will reenroll here next semester?

- a. very likely / somewhat likely / neutral / somewhat unlikely / very unlikely
/ not applicable

13. How likely is it you will earn a degree from here?

- a. very likely / somewhat likely / neutral / somewhat unlikely / very unlikely
/ not applicable Factor

Factor 4: Degree Commitment

14. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?

- a. very supportive / somewhat supportive / neutral / somewhat unsupportive / very unsupportive / not applicable

15. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?

- a. very strong / somewhat strong / neutral / somewhat weak / very weak / not applicable

16. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?

- a. very disappointed / somewhat disappointed / neutral / not very disappointed / not at all disappointed / not applicable

17. There are so many things that can interfere with students making progress toward a degree, feelings of uncertainty about finishing you are likely to occur along the way. At this moment in time, how certain are that you will earn a college degree?

- a. very certain / somewhat certain / neutral / somewhat uncertain / very uncertain / not applicable

18. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of a degree, here or elsewhere?
- a. very strong / somewhat strong / neutral / somewhat weak / very weak / not applicable
19. When you consider the benefits of having a college degree and the costs of earning it, how much would you say that the benefits far outweigh the costs if at all?
- a. Benefits far outweigh the costs/ benefits somewhat outweigh the costs / benefits and costs are equal / costs somewhat outweigh the benefits / costs far outweigh the benefits / not applicable

Factor 4: Social Integration

20. What is your overall impression of the other students here?
- a. very favorable / somewhat favorable / neutral / somewhat unfavorable / very unfavorable / not applicable
21. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?
- a. very much / much / some / little / very little / not applicable
22. How strong is your sense of connectedness with others (faculty, students, staff) on this campus? very strong / somewhat strong / neutral / somewhat weak / very weak / not applicable
23. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?

- a. very satisfied / somewhat satisfied / neutral / somewhat dissatisfied / very dissatisfied / not applicable
24. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?
- a. very much / much / some / little / very little / not applicable
25. How much do you think you have in common with other students here?
- a. very much / much / some / little / very little / not applicable
26. How often do you wear clothing with this college's emblems?
- a. very often / somewhat often / sometimes / rarely / very rarely / not applicable

Factor 5: Supportive Services Satisfaction

27. How satisfied are you with the academic advice you receive here?
- a. very satisfied / somewhat satisfied / neutral / somewhat dissatisfied / very dissatisfied / not applicable
28. How well does your higher education institution communicate important information to students such as academic rules, degree requirements, individual course requirements, campus news and events, extracurricular activities, tuition costs, and financial aid and scholarship opportunities?
- a. very well / well / neutral / not well / not at all well / not applicable
29. How easy is it to get answers to your questions about things related to your education at your higher education institution?
- a. very easy / somewhat easy / neutral / somewhat hard / very hard / not applicable

30. How much input do you think you can have on matters such as course offerings, rules, and regulations, and registration procedures?
- a. very much / much / some / little / very little / not applicable
31. If you have needs that are different from the majority of students at your higher education institution, how well does your institution meet those needs?
- a. very well / well / neutral / not well / not at all well / not applicable
32. How fairly do you think students are handled at your higher education institution?
- a. Very fair, somewhat fair, neutral, somewhat unfair, very unfair, not applicable

Factor 6: Academic Conscientiousness

33. College students have many academic responsibilities. How often do you forget those that you regard as important?
- a. very often / somewhat often / sometimes / Somewhat rarely / very rarely / not applicable
34. How often do you turn in assignments past the due date?
- a. very often / somewhat often / sometimes / rarely / very rarely / not applicable
35. How often do you miss class for reasons other than illness or participation in school-related activities?
- a. very often / somewhat often / sometimes / rarely / very rarely / not applicable
36. How often do you arrive late for classes, meetings, and other college events?

- a. very often / somewhat often / sometimes / rarely / very rarely / not applicable

Appendix B

Interview Protocol

Interview Name: _____

Date of interview: _____

Introductory Statement: Thank you for taking the time to participate in the survey and volunteering to have an interview with me. Through this research study, I am interested in understanding how and why New Jersey Air and Army National Guard undergraduate students who were on orders during or in response to the COVID-19 health crisis and enrolled at a New Jersey state higher education institution persisted through their coursework. Your responses will be recorded and transcribed word for word in order to assure that I do not paraphrase your thoughts and lead to misinterpretations. Your answers reflect on your experiences and perspectives, and because of this, there are no right or wrong answers. If at any point of the interview you need clarification, have a question, or need to stop for any reason, please let me know. Do you have any questions or concerns before beginning the interview?

Number	Question
Q1	Tell me a little about yourself. Why did you join the National Guard?
Q2	Why did you decide to pursue higher education?
S1	Situation
MQ1	How did the timing of the health crisis impact your academic endeavors?
MQ2	Describe to me what your study environment was like while you were on orders/ at your activation location?
S2	Self

MQ1 The COVID-19 health crisis put a lot in perspective for many people, what was most important to you during the health crisis? Follow-up: Is that different from prior to the pandemic?

MQ2 Tell me a little but about your outlook on your higher education when you were on orders/activated?

S3 Support

MQ1 Tell me a little bit about the institutional resources or accommodations that you were provided to assist you throughout your time on orders/while you were activated?

MQ2 Describe to me your support system at home while you were on orders/activated?

S1 Strategies

MQ1 Describe to me how the timing of the health crisis impacted your ability to continue through your coursework?

MQ2 Tell me what it was like dealing with multiple transitions while you were on order/activated?

Closing Statement

Thank you for participating in my research study. All of your responses will be kept strictly confidential, and any information used in my study will not identify you as the respondent.

Thank you for your time, and thank you for your service throughout the COVID-19 health crisis and beyond.

End of Interview Protocol

Appendix C

Participant Consent Form

A Mixed Methods Study: Exploring how New Jersey Air and Army National Guard Undergraduate Students Persisted Through Coursework Throughout the COVID-19 Health Crisis.
Ariel J. Gilbert
Rowan University

You are invited to be in a research study that will look to understand how and why New Jersey Air and Army National Guard students persisted through their coursework at New Jersey state higher education institutions. You were selected as a possible participant because you are an Air or Army National Guard member or veteran who was enrolled in an undergraduate program at a New Jersey state higher education institution when the COVID-19 health crisis occurred or was occurring. Additionally, you are above the age of 18 years old. Please read this form and ask any questions you may have before agreeing to be in the study.

Ariel Gilbert, a doctoral student in the School of Education at Rowan University, is conducting this study.

Background Information: The purpose of this study is to identify how and why New Jersey Air and Army National Guard undergraduate students persisted through their coursework throughout the COVID-19 health crisis and the multiple transitions occurring in both their civilian and military lives.

Procedures: If you agree to be in this study, I would ask you to do the following things:
1. Complete the anonymous survey. It should take no more than 15 minutes to complete.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to stakeholders (college administrators, high school administrators, students, and parents) may find the results beneficial to know how and why National Guard students are more likely to persist at the college level.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records. Participants will not provide their name or any identifying demographic information. Data will be stored on a locked computer in a secure system. After three years, data will be deleted.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Rowan University. If you decide to participate, you are free to not answer any question or withdraw at any time, prior to submitting the survey, without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Ariel Gilbert. You may ask any questions you have now. If you have questions later, you are encouraged to contact at gilber48@students.rowan.edu. You may also contact the researcher's faculty chair, Dr. Ane Johnson at johnsona@rowan.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board at irb@rowan.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature of Participant

Date

Appendix D

Survey Instructions

Thank you for agreeing to participate in this research study. Please take a few minutes to read through the steps in order to understand your expectations for this quick survey.

Step 1: You will read a description of the study important terms that will be used throughout the survey.

Step 2: You will be asked to fill out a few personal questions about yourself (age, sex, and race).

Step 3: You will be asked to provide information your higher education experience, and the length of days on orders throughout the health crisis.

Step 4: You will answer 36 questions describing your current satisfaction at the university.

Step 5: You will submit the survey, and thank you for participating!

Step 6: (If you responded yes to an interview): You will receive an email that will allow you to schedule a time for the interview with the researcher. Thank you for your participation!

Appendix E

Binary Logistic Regression Output from SPSS with Block Two

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	104	92.0
	Missing Cases	9	8.0
	Total	113	100.0
Unselected Cases		0	.0
Total		113	100.00

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Yes	0
No	1

Block 0: Being Block

Classification Table ^{a,b}

		Predicted		Percentage Correct	
		Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?			
		Yes	No		
Step 0	Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?	Yes	0	30	0
		No	0	74	100.00
Overall Percentage					71.2

a. Constant is included in the model.

b. The cut value is .500

		B	S.E.	Wald	df	Exp(B)	Sig.
Step 1a	AI						
		-.144	0.84	2.976	1	.866	.085
	ISC	.157	.060	6.896	1	1.170	.009
	SI	.057	.071	.646	1	1.059	.422
	SSS	.061	.065	.886	1	1.063	.346
	AC	1.49	.071	4.336	1	1.160	.037
	FS	.065	.060	1.199	1	1.067	.274
	DC	.022	.045	246	1	1.023	.620
	Race	-.031	.069	.199	1	.970	.656
	Socioeconomic	.191	.150	1.622	1	1.211	.203
	Gender	-.302	.506	.356	1	.739	.551
	Age	-.054	.066	.680	1	.947	.409
	Constant	-2.248	2.725	.680	1	.106	.409

a. Variable(s) entered on step 1: Race, Socioeconomic, Gender, Age.

Variables not in the Equation

Step 0	Variables	Score	df	Sig.
	AI	.341	1	.559
	ISC	8.573	1	.003
	DC	4.911	1	.027
	SI	2.655	1	.103
	SSS	3.352	1	.067
	VariableAC	7.178	1	.007
	VariableFS	1.345	1	.246
	Overall Statistics	18.121	7	.011

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

Step 1		Chi-square	df	Sig.
	Step	19.464	7	.007
	Block	19.464	7	.007
	Model	19.464	7	.007

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	105.496 ^a	.171	.244

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Appendix F
Binary Logistic Regression Output from SPSS of the Survey without Demographics

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	104	92.0
	Missing Cases	9	8.0
	Total	113	100.0
Unselected Cases		0	.0
Total		113	100.00

a. If weight is in effect, see classification table for the total number of cases.

**Dependent Variable
Encoding**

Original Value	Internal Value
Yes	0
No	1

Block 0: Being Block

Classification Table ^{a,b}

Step 0	Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?	Predicted		Percentage Correct	
		Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?			
		Yes	No		
Step 0	Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?	Yes	0	30	0
		No	0	74	100.00
Overall Percentage					71.2

a. Constant is included in the model.

b. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	.903	2.6	17.401	1	<.001	2.467

Variables not in the Equation

			Score	df	Sig.
Step 0	Variables	AI	.341	1	.559
		ISC	8.573	1	.003
		DC	4.911	1	.027
		SI	2.655	1	.103
		SSS	3.352	1	.067
		VariableAC	7.178	1	.007
		VariableFS	1.345	1	.246
		Overall Statistics		18.121	7

Block 1: Method = Enter

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	19.464	7	.007
	Block	19.464	7	.007
	Model	19.464	7	.007

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	105.496 ^a	.171	.244

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	2.925	8	.939

Contingency Table for Hosmer and Lemeshow Test

Did you withdraw from all of your classes from between and including	Did you withdraw from all of your classes from between and including
--	--

		Spring 2021 and Spring 2020? = Yes		Spring 2021 and Spring 2020? = No		Total
		Observed	Expected	Observed	Expected	
Step 1	1	7	6.737	3	3.263	10
	2	6	5.444	4	4.556	10
	3	3	4.265	7	5.735	10
	4	4	3.509	6	6.491	10
	5	2	2.706	8	7.294	10
	6	3	2.295	7	7.705	10
	7	1	1.736	9	8.264	10
	8	1	1.368	9	8.632	10
	9	2	1.046	8	8.954	10
	10	1	.895	13	13.105	14

Classification Table ^{a,b}

		Predicted Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?		Percentage Correct	
		Yes	No		
Step 0	Did you withdraw from all of your classes from between and including Spring 2021 and Spring 2020?	Yes	13	17	43.3
		No	7	67	90.5
Overall Percentage					76.9

a. The cut value is .500

Binary Logistic Regression

	B	S.E.	Wald	df	Sig	Exp(B)	95% C.I. for Upper	95% C.I. for Upper
Step 1a								
AI	-.112	0.08	1.971	1	.160	.894	.765	1.045

ISC	.131	.055	5.728	1	.017	1.140	1.024	1.270
SI	.048	.068	.497	1	.481	1.049	.918	1.199
SSS	.044	.064	.473	1	.491	1.045	.922	1.184
AC	1.56	.069	5.052	1	.025	1.169	1.020	1.339
FS	.069	.059	1.362	1	.243	1.071	.954	1.202
DC	.017	.043	.146	1	.702	1.017	.934	1.106
Constant	-3.247	1.644	3.965	1	.046	.038		

a. Variable(s) entered on step 1: AI, ISC, SI, SSS, AC, FS, DC

Appendix G
Survey Respondents Demographics

Demographic	Number of Participants	Total Percent	Percent Persisted
Gender			
Woman	54	48%	72%
Man	58	52%	67%
Non-Binary	1	0%	0%
Race/Ethnicity			
Asian	5	4%	80%
Black	18	16%	50%
White	57	75%	75%
Bi-Racial	20	18%	70%
Latino	1	.8%	0%
Hispanic	3	2%	75%
Other	8	7%	56%
Age			
19-22	63	56%	75%
23-26	29	26%	62%
27-30	11	9%	64%
31-36	10	9%	60%
Mother's Education Level			
Less than high school	2	1%	50%
High Graduate/GED	27	24%	74%
Technical School	4	4%	100%
Some College	22	19%	68%
2 Year Degree	13	12%	46%
4 Year Degree	31	27%	68%
Professional Degree	13	12%	85%
Prefer to Not Disclose	1	.8%	0%

Appendix H

Interview Respondents Demographics

Name	Age	Branch	Gender	Ethnicity	Academic Status
Paula	24	Air National Guard	Woman	White	Persisted
Roma	27	Air National Guard	Woman	White	Persisted
Lauren	24	Army National Guard	Woman	Hispanic	Persisted
Tina	22	Army National Guard	Woman	Biracial	Persisted
Skylar	24	Army National Guard	Woman	Asian	Did Not Persist
Star	21	Army National Guard	Woman	White	Persisted
Rodger	21	Army National Guard	Man	White	Persisted
Rucker	21	Army National Guard	Man	White	Persisted
Austin	23	Army National Guard	Man	White	Persisted
Fred	23	Army National Guard	Man	White	Did Not Persist
Fox	28	Air National Guard	Man	White	Did Not Persist
Tracks	27	Army National Guard	Man	White	Persisted

- 25% did not persist, 75% persisted
- 50% woman response, 50% man response
- 25% NJ Air National Guard, 75% Army National Guard

Interview Demographics by Age

Age	21	22	23	24	27	28
Percent	25%	8.4%	16.6%	25%	16.6%	8.4%