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Factors That Predict Military-Connected Student Academic Success at a Community College

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
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Abstract

Factors That Predict Military-Connected Student Academic Success at a Community

College

by

Susan Neimic

M.Ed., Bridgewater State University, 2012

B.S., Mercy College, 2005

Project Study Submitted in Partial Fulfillment

of the Requirements for the degree of

Doctor of Education

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May 2022

Abstract

The problem addressed through this study is the low graduation rate of military-connected students who received benefits from military funding programs (FMCSs) at a community college in the northeastern United States (CCNE). Increasing the graduation rate will prepare more FMCSs for gainful employment and their transition into civilian life. The purpose of this quantitative study was to measure the effects of the nontraditional predictors, age, gender, and ethnicity on completing a 2-year associate degree within 6 years for FMCSs. The research questions determined whether nontraditional predictors for success were the same for FMCSs. Knowles's theory of andragogy provided the framework for this study because it identifies foundational assumptions for adult learning. Deidentified secondary data from all FMCSs enrolled in an associate degree program at CCNE in September 2013 were used. The logistic regression model results showed no statistical significance, $\chi^2(5) = 1.19$, $p = .88$, meaning that age, gender, and ethnicity were not significant predictors for FMCSs. These results imply that FMCSs are a unique group and led to a policy paper that includes recommendations based on FMCSs' differences from other students. The recommendations include professional development focused on creating a safe and inclusive learning environment, a military-connected student orientation, an interdepartmental research committee, and the recruitment of FMCSs older than 25 years. Implementing a new policy based on these recommendations could potentially affect FMCS's academic success resulting in positive social change. This policy paper can be used as a template at the local site and other community colleges to address educational issues of other unique groups resulting in long-term positive social change.

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Dedication

I dedicate this project to the military-connected students who currently serve or have served the United States and protected the American people. I hope that this policy's recommendations will improve their educational experience and success in higher education and prepare them for productive lives in civilian society. I also want to recognize my family and friends who have supported me through my doctoral journey. First and foremost is John, my life partner, an amazing man who has taken care of me so I could complete this project. I will be forever grateful for his love and kindness. My aunts Nancy and Penny are strong, successful women who have encouraged me to succeed. My brother David, a talented "Mr. Fix-it," has been a stable presence in my life and has always been there for me. Finally, my best friend Sue has always been my cheerleader and an emotional life ring for more times than I can remember. Thank you to all the beautiful people in my life who have supported and encouraged me. I couldn't have made it without you.

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I want to acknowledge my doctoral committee members, who worked hard to make this research study the best that it can be. First and foremost, I want to thank my Committee Chair, Dr. Sarah Inkpen. Your dedication, kindness, and compassion helped motivate me to reach the finish line. You encouraged me to believe that I could persevere through this long and arduous process. I'll never forget the twists and turns that my study took. I will miss our weekly meetings to discuss my research and other curious things in life. Although there were times that I wasn't sure I would make it, you helped me to believe that I could finish this monumental project. You showed me there is life after completing the doctoral process and that I am a researcher! Many thanks to my Committee's Second Member, Dr. James Crosby. You took the time to provide me with valuable insight and feedback to improve my study. Your positive attitude and kindness were reflected in your comments about improving my drafts and the thoughtful questions posed during my oral presentations. A final thanks to Dr. Beate Baltes for her feedback that helped me get my proposal approved and improve my study, so it was ready for the final dissertation stages. I learned so much from you all, and I offer my heartfelt thanks.

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Section 1: The Problem

The college student population is far more diverse than in previous decades due to the increased enrollment of nontraditional students (Osam et al., 2017). The National Center for Education Statistics (NCES) (2002) defined nontraditional students as having one or more of the following characteristics: delayed college enrollment, part-time enrollment, financial independence, full-time employment while enrolled, having dependents that were not a spouse, was a single parent, did not receive a conventional high school diploma. This definition is still commonly cited in recent literature (Thornton, 2020). Although the NCES defines military-connected students as nontraditional, they are considered a special subset of the college population because of their unique service-related experiences (Johnson & Appel, 2020). Military work experience builds resilience and develops diverse perspectives, problem-solving abilities, and leadership skills that may help service members succeed in higher education (Kirchner & Akdere, 2017).

Military-connected students consist of veterans, reservists, and active-duty personnel and share at least one characteristic of the NCES's (2002) definition of a nontraditional student. These students may have family responsibilities and enroll in higher education while enlisted in the military or after they separate from service. Veterans are service members discharged from any U.S. military branch (Cate et al., 2017; Griffith et al., 2020) and may be full or part-time while enrolled in college courses. Reservists are part-time service members who participated in periods of active military service, often one weekend per month, and may have had civilian jobs while enrolled in

higher education (Griffith et al., 2020). Active-duty personnel served as full-time military personnel while enrolled in college courses.

This study focused on the funded military-connected student (FMCS) population. FMCSs received monies from military education programs while enrolled full or part-time in an associate degree program at a community college in the northeastern United States (CCNE). Military education programs provide funding earmarked for FMCSS for their service. The federal government allocates taxpayer-funded education benefits for FMCSs to ease their financial burden and includes the Chapter 1606 Montgomery GI Bill Active Duty Benefit (MGIB), Vocational Rehabilitation and Employment Program (VR&E), Montgomery GI Bill Selected Reserve Benefit (MGIB-SR), and Post-9/11 GI Bill (GI Bill). Throughout this study, the beforementioned military funding programs collectively referred to those received by FMCSs. Military funding programs provided educational benefits for nearly 900,000 FMCSs in 2018, but many of these students did not complete their academic programs (Johnson & Appel, 2020). Cate (2014) reported that 51.7% of FMCSs completed their education program between 2002 and 2010. In a more recent study, Cate et al. (2017) reported a success rate of 54% between 2009 and 2013. Even though military funding programs reduce FMCSs' financial challenges, almost one-half of FMCSs do not complete their academic programs (Cate, 2014; Cate et al., 2017), which is a poor return on the taxpayer's investment.

The Local Problem

The problem addressed through this study is the low graduation rate of FMCSs at CCNE. The Office of Institutional Research and Assessment (OIRA) at CCNE reports

data for first-time, full-time students. The reported statistics do not include part-time enrollments, but these data are available upon request. According to the interim director of the college's OIRA, only 10% of the 550 FMCSs enrolled full-time, with 90% attending part-time. At CCNE, only 7% of those enrolled in the 2010-2011 academic year as first-time, full-time FMCSs completed an associate degree within 4 years (NCES, n.d.).

According to Johnson and Appel (2020), FMCSs may have previously earned college credit. Furthermore, many of these students enroll part-time because they have family and work responsibilities and may need more time to complete an associate degree (Jenner, 2019). The National Student Clearinghouse collects postsecondary data using a 6-year time frame that includes full- and part-time enrollments resulting in more realistic community college completion rates than those reported by the U.S. Department of Education (Juszkiewicz, 2017). Therefore, this study included all full- and part-time FMCSs and defined the dependent variable as completing an associate degree at CCNE within 6 years to provide more comprehensive statistics for the FMCSs' population.

Previous research on FMCSs has used nontraditional factors such as age, gender, and ethnicity to predict success (Morrill & Somers, 2020). FMCSs have skills learned over time through their military experience to help them succeed in higher education (DeCoster, 2018). Therefore, older students with military experience may be more successful in higher education. The number of women in the military accounts for only 27% of service members, yet they enroll more frequently in higher education and have higher completion rates than men (DeCoster, 2018; Morrill & Somers, 2020). Because of

this, gender may be a significant predictor of academic success for FMCSs. The ethnic diversity of the population is 70% White, 8% African American, 8% Latino, and 15% of other ethnicities (DeCoster, 2018). Using grade point average (GPA) for academic success, the minority racial groups scored significantly lower than White students (DeCoster, 2018). Therefore, ethnicity may predict FMCSs academic success because 30% of the population is non-White (Morrill & Somers, 2020). Using the nontraditional factors of age, gender, and ethnicity, Kinkle (2020) found that White females between the ages of 25 and 29 were significantly more successful than other groups. Results from this study may indicate that FMCSs have the same predictors, making them a subset of nontraditional students. If FMCSs have different predictors, they may be a unique group that requires support from CCNE.

Although CCNE provides various support services, the associate degree completion rate for first-time, full-time FMCSs is only 7%. The OIRA collects statistics on FMCSs yearly, including age, gender, and ethnicity. Data on part-time enrollments are available but not included in the data reported by CCNE. Therefore, the academic success of part-time FMCSs is unknown. This study included all FMCSs to determine whether the factors of age, gender, and ethnicity predict the academic success of students who enrolled full and part-time

Rationale

The graduation rate for FMCSs is 7% of first-time, full-time students who completed their associate degree compared to 30% of the total CCNE student college population (NCES, 2020). According to the interim director of OIRA, this graduation rate

does not include 90% of the FMCS population because the statistics do not include part-time students or those who previously matriculated at another educational institution. Military funding programs provide monies to ease the financial burden for FMCSs to earn an associate degree at CCNE and help them transition into civilian life by preparing them for gainful employment. Taxpayers are significant stakeholders of the federal funding available to FMCSs and require assurance of a positive return on investment.

Community colleges attract many FMCSs due to their convenient location and dedicated services that support these students (Williams-Klotz & Gansemer-Topf, 2018). These institutions often have flexible course delivery options that appeal to this population because many are older than traditional-aged students and have family and work responsibilities (Durosko, 2017). CCNE is a convenient and cost-effective option for those with limited financial resources for postsecondary education. It allows them to conserve some of their military funding program benefits for post-graduation education opportunities.

Adult learners are often motivated to enter higher education because of their life and work experiences (Chen, 2017). They frequently have extensive employment experience, including military experience, and spend a significant amount of their time outside of the classroom at work (Chen, 2017). FMCSs often have developed technical skills through their service experience in technology, engineering, or medical specialties, along with soft skills such as flexibility, persistence, and leadership that evolve throughout a military career (Davis & Minnis, 2017). CCNE offers up to 75% of college credit for completed military coursework and occupation experience related to the

student's degree plan, accelerating the time needed to complete an associate degree. Some occupations require students to be certified through an accredited academic program to qualify for work outside of a military organization. For example, employment in many medical specialties requires passing certification and state licensing exams to apply for jobs in the local economy. Students can receive college credit at CCNE for their medical experience and training gained through military service, which will expedite the time needed to earn the degree necessary to sit for certification and licensing examinations. Although CCNE is a good choice for FMCSs, only 7% enrolled as first-time, full-time students completed their associate degree within 4 years.

Identifying factors that may affect FMCSs academic success will inform college leaders about curriculum design and course offerings to improve the graduation rate for this group of students. Age, gender, and ethnicity are frequently used in research on student success (Morrill & Somers, 2020) and were used as predictor variables for FMCSs enrolled in an associate degree program at CCNE.

CCNE provides structured, guided pathways for students interested in academics and careers such as the arts, humanities, business, communications, engineering, health, science, math, and data analytics. A better understanding of the FMCS population may justify designing a dedicated pathway for these learners to improve their graduation rate. The purpose of this quantitative study was to measure the effects of the nontraditional factors age, gender, and ethnicity on completing a 2-year associate degree at CCNE within 6 years for FMSs. This study defined the dependent variable as completing an

associate degree at CCNE within 6 years as a realistic community college graduation rate, as Juszkiewicz (2017) suggested.

Definition of Terms

Guided pathways: Baston (2019) reported that community colleges throughout the United States developed guided pathways designed to help students focus on their academic and career goals. Guided pathways provide structured student learning to decrease the time needed to complete an associate degree. CCNE designed guided pathways that guide students through an academic curriculum that leads to the degree that prepares them for employment in the local economy.

Military-connected students: Military-connected students are veterans, reservists, and active-duty personnel who share some of the same nontraditional characteristics as their civilian counterparts (Johnson & Appel, 2020). For this study, these students received monies from at least one military funding program and enrolled in an associated degree program at CCNE.

Military funding programs: Military funding programs at CCNE collectively refer to Chapter 31 VR&E, Chapter 1606 MGIB-SR, and GI Bill. The VR&E program provides education funding for students with a military service-connected disability (U.S Department of Veteran Affairs, 2021). The MGIB-SR program provides education funding for reservists in any military branch who served at least 6 years (U.S. Department of Veterans Affairs, 2022). FMCSs who served on active duty for 36 months after September 11, 2001, qualify for education benefits under the GI Bill (Bailey et al., 2017).

Nontraditional factors: This study used the nontraditional factors of age, gender, and ethnicity, previously used to predict academic success (Morrill & Somers, 2020).

Nontraditional students: The NCES defined nontraditional students as those who have one or more of the following characteristics: delayed college enrollment, part-time enrollment, financial independence, full-time employment while enrolled, had dependents who were not a spouse, was a single parent, did not receive a conventional high school diploma (NCES, 2002).

Prior-learning credit: Colleges can award credit for knowledge, skills and abilities learned through military experiences and demonstrate equivalency to college course offerings (Bergman & Herd, 2017). CCNE offers college credit for prior learning from military service coursework, demonstrated technical proficiencies, and college-level testing.

Significance of the Study

FMCSs have had access to higher education by utilizing government-sponsored financial aid, which has proven beneficial to the U. S. economy since World War II and can continue to do so (Jenner, 2017). The number of FMCSs in higher education eligible for military funding program benefits has significantly increased, relieving the financial burden of completing a college degree (Bergman & Herd, 2017). Although some data exist regarding the factors linked to FMCS educational outcomes, most are related to baccalaureate and graduate degree programs, not community college programs.

Understanding the effect of the nontraditional factors of age, gender, and ethnicity on earning an associate degree for FMCSs at CCNE provided research-based evidence

that led to recommendations to improve the FMCS graduation rate. Belfield and Bailey (2017) demonstrated the economic benefits of earning a 2-year associate degree at a community college. Graduates who received a 2-year degree had income between $1,160 and $1,790 higher per quarter than those who did not complete their program. An increase in college graduates who earn higher wages will lead to social change and help the local and U.S. economies remain competitive by providing the skilled workforce that employers require (Waiwaiole & Elston, 2017). Therefore, utilizing benefits from military funding programs to earn a 2-year associate degree at CCNE prepares FMCSs for employment in the economy, supports their transition into civilian life, and justifies the federal monies allocated for their education. Analysis of the effect of the nontraditional factors on the academic success of FMCSs provided evidence-based research that college leaders can use to assess the effectiveness of curriculum design, resources, and programs on this population at CCNE.

Research Questions and Hypotheses

FMCSs share many characteristics with nontraditional students (Johnson & Appel, 2020). Therefore, this study used the factors of age, gender, and ethnicity previously used in research on nontraditional students (Morrill & Somers, 2020) to predict the academic success of FMCSs.

RQ1: What is the effect of age on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

$H_{1}0$: Age is not a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

H_{1A}: Age is a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

RQ2: What is the effect of gender on completing a 2-year associate degree at CCNE within 6years for FMCSs?

H_{20}: Gender is not a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

H_{2A}: Gender is a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

RQ3: What is the effect of ethnicity on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

H_{30}: Ethnicity is not a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

H_{3A}: Ethnicity is a predictor for completing a 2-year associate degree at CCNE within 6 years for FMCSs.

Review of the Literature

This literature review revealed the significance of andragogy as the theoretical foundation for this study, military funding programs, and the community colleges' role in educating FMCSs. The literature search demonstrates this population of students has factors similar to nontraditional civilian students and unique experiences due to their military service that may affect their academic success. The search terms used in Education Source, ERIC, Sage Journals, Taylor and Francis Online, NCES Publications, and ProQuest Central databases included *military-connected students, veterans, active-*

duty personnel, reservists, community colleges, factors for academic success, *higher education,* and *nontraditional students.* Various government websites provided information about the military branches, military occupations, and education and training received during military service. This study used the graduation rates and demographic data reported to the NCES by CCNE.

Theoretical Foundation

Knowles's (1978) theory of andragogy provided the framework for this study. This theory applies to FMCSs enrolled in higher education because adult learners are self-directed and motivated to learn because of their experiences (Bergman & Herd, 2017; Persyn & Polson, 2012). FMCSs enter higher education with vast life experience gained over time through their service, which may contribute to their academic success (Bergman & Herd, 2017). Therefore, the principles of andragogy can explain how military-related experiences affect adult learning and their ability to complete an associate degree at CCNE.

Andragogy is a learning theory based on assumptions that describe adults' unique characteristics and how they learn (Knowles, 1978). Alexander Kapp, a German educator, was the first to write about this concept in 1833. Others followed in Europe and the United States to expand their understanding of andragogy as the art and science of adult learning (Henschke, 2011). Using his extensive experience as an adult educator, Malcolm Knowles incorporated his meaning of adult learning into his theory of andragogy. Knowles's premises were that adult learners are self-directed, and teachers should not be presenters of content but instead facilitate learning using a learner-centered

approach. CCNE provides professional development for education professionals to improve teaching strategies and learning assessment methods based on andragogical principles making this institution a good choice for FMCS. Faculty learn how to apply learning frameworks and evidence-based research to enhance student learning and academic success.

Knowles defined adult learners using 2 criteria (Taylor & Kroth, 2009). First, an adult perceives themselves as responsible for their own lives. Second, they perform social adult roles such as wage earner, marital partner, parent, citizen, and military servicemember. Therefore, Knowles posited that adults learn differently from children and require teaching methods that facilitate learning based on 6 foundational assumptions. Experience is the most significant because adults often have a pre-established belief system based on their life experiences (Taylor & Kroth, 2009). Knowles's assumption about experience provides a framework for FMCSs' learning because their service-related experiences gained through their military training may affect their learning and academic success at CCNE. Knowles's 6 foundational assumptions are the following:

1. Experience: Adults gain experience as they age, contributing to their learning. They most often have more life and work experiences than children, which become a valuable resource for their education.

2. Self-concept: Adults have moved from dependent to self-directed and can resist when they believe others insist on their compliance.

3. Readiness to learn: Adults' readiness to learn aligns with the needs of their social roles and depends on the relevance of the learning.

4. Orientation to learning: Adult learning is problem-centered and motivated by solving real-life problems.

5. Motivation to learn: Adults react to external factors, but internal motivators like self-esteem and the fulfillment of goals often affect their learning.

6. The need to know: Adults want to understand why the learning content is relevant. They value learning and invest their time and energy into their studies when they do. Therefore, teachers must recognize adult students' need to know to convey the necessity of learning.

The Army, Navy, Air Force, and U.S. Marine Corps incorporate adult learning theory into their military education programs to meet organizational and learner needs (Persyn & Polson, 2012). The federal government established a panel of experts representing all military branches to evaluate officer education and teaching practices. Recommendations included experience-based learning activities and self-directed learning practices that encourage student engagement using real-world applications. More recently, the U.S. military recognized the value of these adult learning principles for enlisted servicemembers and now incorporates them into their training (Persyn & Polson, 2012).

Military-based education aligns with Knowles's 6 foundational assumptions for adult learning. Servicemembers of all military branches have experiences influencing their education and training. They have a self-concept defined by their military

experiences and are independent adults who benefit from self-directed learning. Military education is relevant to servicemembers' current social roles because they have experience solving real-world problems. Additional training has value for the learner because it supports their current occupation and can lead to professional advancement. When FMCSs enroll at CCNE, they enter a learning environment based on andragogical principles that sustain their adult learners' needs and transition into higher education.

Each military branch provides basic training and specialized training for their military jobs (Davis & Minnis, 2017). FMCSs experiences gained through their military service can translate to college credit applicable to their associate degree program. CCNE offers credit for prior learning for military service coursework, demonstrated technical proficiencies, and college-level testing that may help FMCSs accelerate the time needed to complete their academic program.

In 2015, the Army developed a learning concept to prepare soldiers for complex and dynamic military environments using adult learning principles (Persyn & Polson, 2012). Training will prepare instructors to facilitate learning through collaboration and problem-solving exercises to encourage learners to understand its relevance and value. Learning opportunities will exist at locations where soldiers will use the new knowledge. This model requires instructors to motivate learners encouraging them to retain the knowledge needed for future military operations.

Servicemembers develop their self-concept through their experiences in one of the military branches and become more self-directed in their learning. For instance, the U.S. Marine Corps developed a formal education program for its officers and enlisted

personnel (Zacharakis & Van Der Werff, 2012). In this program, the individual is primarily responsible for their professional development through a reading program designed to help them progress beyond their occupational specialty. The training is relevant to the marine's role in the military, leading to career advancement.

The Navy also developed a career development system based on self-directed learning (Hedge et al., 2006). Five competency areas identify the knowledge, skills, and abilities for success and advancement using a weighted algorithm that computes a score based on the individual's achievement. The algorithm defines career paths according to the level of development and identifies areas of potential advancement. Sailors can view their development records to determine what is needed to advance their careers.

The Air Force uses self-directed learning for Multi-Domain Operations (MDO) education and training, preparing airmen to defend against attack by air, land, sea, space, and cyberspace (Flack & Reith, 2019). Self-directed learning occurs in the work environment and replaces instructor-led classroom learning. Competency-based education prepares airmen for the rapidly changing technical requirements in a digital military environment and empowers them to become lifelong learners in control of their learning plan.

The U.S. military recognizes the importance of using adult learning principles for their education and training programs (Persyn & Polson, 2012). Instructor training resulted in experience-based and self-directed learning practices that facilitate servicemember learning. FMCSs with service-related experience enroll at CCNE to prepare for their transition into civilian life and employment in the local economy. CCNE

supports FMCSs with a curriculum based on andragogical principles and awards college

credit for learning gained from military experiences. Knowles's (1978) theory of

andragogy provided a framework for this study because its's 6 basic assumptions align

with FMCSs as adult learners with service-related experiences that may affect their

learning and academic success at CCNE. Knowles's andragogy aligns with the research

questions and hypotheses because the nontraditional factors age, gender, and ethnicity

were used to predict learning outcomes measured by completing an associate degree.

Review of the Broader Problem

Military funding programs provide federal education funding for those who

served in the U.S. military to help prepare them for civilian jobs (Stevens, 2018). These

learners may be a subset of the nontraditional student populations because they have

similar characteristics but are unique due to their military service (Johnson & Appel,

2020). Community colleges are an appealing option for FMCSs because they often

provide services and staff dedicated to their academic success (Williams-Klotz &

Gansemer-Topf, 2018). Therefore, understanding the factors that affect FMCSs'

academic success at CCNE provided evidence-based research about this population to

justify the taxpayer's return on investment from military funding programs.

Military-Connected Students

For this study, military-connected students are referred to as FMCSs because they

received monies from a military funding program while enrolled at CCNE. FMCSs are

veterans, reservists, and active-duty personnel who served or are still serving in the U.S.

Air Force, Army, Coast Guard, Navy, or Marine Corps. Young men and women must be

at least 17 years old to enlist in the U.S. military and may enroll in higher education using their military funding benefits if they have completed 90 days of service (USAGov, 2021; U.S. Department of Veterans Affairs, 2016). These learners share many nontraditional characteristics, such as working full-time or having dependent children while enrolled in higher education (Johnson & Appel, 2020). FMCSs meet at least one of the criteria of the NCES's (2002) definition for nontraditional students: delayed college enrollment, part-time enrollment, financial independence, full-time employment while enrolled, had dependents that were not a spouse, was a single parent, did not receive a conventional high school diploma. Although FMCSs fit the NCES's nontraditional definition, they are considered a subset of this population because of their unique service-related experiences (Johnson & Appel, 2020).

Nontraditional Students

Remenick (2019) reported that undergraduate enrollment trends for nontraditional students are increasing and expected to continue (Chen, 2017). The NCES (2002) defines nontraditional students as those who have one or more of the following characteristics: delayed college enrollment, part-time enrollment, financial independence, full-time employment while enrolled, had dependents who were not a spouse, was a single parent, did not receive a conventional high school diploma. Although FMCSs share nontraditional characteristics with their civilian counterparts, they may be unique due to their military service experience (Johnson & Appel, 2020).

Many students enroll part-time because of employment and family obligations making full-time enrollment impossible (Remenick, 2019). CCNE reported that 59% of

all students attend part-time because of family and work obligations. According to the interim director of the OIRA, approximately 10% of the FMCS population enrolled full-time, with the remaining 90% attending part-time. This study defined FMCSs as a group that received federal taxpayer-funded education benefits for their military service and enrolled in college classes full or part-time.

Nontraditional learners often encounter barriers while balancing school, work, and family and can struggle while prioritizing their academic and personal commitments requiring advising, counseling, financial aid, and tutoring services to support their academic success (Remenick, 2019). CCNE provides educational, financial, and social support services dedicated to the success of its diverse student body. These services include information sessions, opportunities to earn prior learning credit, academic advising, student-centered guided pathways, and financial counseling. A dedicated veteran services office (VSO) offers college resources for FMCSs with unique service-related needs, such as military funding program information, disability services, advising and counseling, and prior learning credit for military experiential learning and coursework. A Veterans Affairs (VA) liaison is also available at each college campus to direct FMCSs to medical and mental health resources. Although CCNE provides dedicated services for FMCSs, the academic resources are not meeting their needs because only 7% of first-time, full-time students graduated with an associate degree.

FMCS Graduation Rates

Although military funding programs provided educational benefits for nearly 900,000 FMCSs, many did not complete their academic programs (Johnson & Appel,

2020). The NCES reported that 33% of all first-time, full-time students enrolled at 2-year

colleges in the fall of 2015 completed their associate degree program within three years

(NCES, 2020). Cate et al. (2017) reported a completion rate of 53.6% for FMCSs and

included students in all post-secondary programs. The authors did not report a national

graduation rate for FMCSs who completed an associate degree. The associate degree

graduation rate for first-time, full-time FMCSs at CCNE is 7% within 4 years for students

who enrolled during the 2010–2011 academic year. The OIRA at CCNE has not made

more recent graduation rates available to the NCES. These data do not include those

enrolled less than full-time.

Factors Predicting Nontraditional Student Academic Success

Previous research on FMCSs has frequently used nontraditional factors such as

age, gender, and ethnicity to predict success (Morrill & Somers, 2020). Most FMCSs

have technical and soft skills learned through their service that are transferable to the

academic setting (DeCoster, 2018). Because older students have had more time to hone

their skills through their military experience, age may significantly affect their learning

and completing an associate degree at CCNE. In another study, Juszkiewicz (2017)

reported that a 2010 cohort of community college students over 24 years old had a higher

completion rate than those between 20 and 24 years, indicating that age is a significant

factor in predicting academic success for nontraditional students.

The number of women serving in the U.S. military has increased in the past

decade and comprises approximately 27% of recruits (DeCoster, 2018; Williams-Klotz &

Gansemer-Topf, 2018). Female enrollments are higher than for men in higher education

and have higher degree completion rates (Williams-Klotz & Gansemer-Topf, 2018). Although the literature indicates that women's academic success has increased, there is a dearth of research related to the effect of gender on FMCS success. Because women tend to have higher completion rates, gender may predict FMCSs completing an associate degree at CCNE.

Morrill and Somers (2020) cited previous research indicating that non-White ethnicities had a negative effect on academic success. The authors reported similar results for the FMCSs in their study performed at a large urban community college in Texas. Alyahyan and Düştegör (2020) also cited numerous studies that nontraditional factors, including ethnicity, were significant in determining academic success. Therefore, the nontraditional factor ethnicity may predict FMCSs academic success. The OIRA at CCNE reported ethnicity for the entire student population as 53% White, 22% Hispanic/Latino, 9% Black or African American, 3% Asian, 0% Native American or Alaskan Native, 0% Native Hawaiian or other Pacific Islander, 6% two or more races, 6% race/ethnicity unknown, and 0% non-resident alien (NCES, n.d.). This study used the White and Hispanic/Latino ethnicity categories because they account for 84% of the FMCS participants. A category named other included the remaining seven ethnic distinctions listed above because they comprise only 16% of the FMCSs. This study used age, gender, and ethnicity to determine if they are the same predictors of success for FMCSs as nontraditional students.

Military Funding Programs

Higher education and the U.S. military have had a long-term relationship since the Morrill Land-Grant College Act passed in 1862 and continues today with the most recent GI Bill version (Hammond, 2017). Since the U.S. Civil War, military conflicts precipitated a need to provide federal funding for FMCSs to attend colleges and universities for education such as service-related training and earning a college degree to prepare graduates for gainful employment (Stevens, 2018). Academic leaders learned that a symbiotic relationship with the federal government provided funding and prestige for their institutions and local communities throughout this time.

During the Civil War, the United States was expanding, and lawmakers in the northeast recognized a need for formal military training (Hammond, 2017). The Morrill Land-Grant College Acts of 1862 and 1890 gifted land grants to the states for new universities (Stevens, 2018). At this time, legislators decided to add a stipulation to fund military training at colleges and universities. This legislation had a minimal effect on FMCSs education which did not change until the National Defense Acts of 1916 and 1920, which led to the Reserve Officers' Training Corps (ROTC). The First World War stifled ROTC program growth, and education funding for FMCSs did not improve until after World War II with the Servicemen's Readjustment Act of 1944, which sent approximately 2 million service members to colleges and universities (Hammond, 2017; Stevens, 2018). In 1946, a government commission determined that the number of higher education institutions must increase, including developing a community college system, to support the nation's growing democracy and economy (Stevens, 2018).

The Servicemen's Readjustment Act was the first iteration of the GI Bill, which lawmakers adjusted according to the political and economic landscapes created by various conflicts, such as the Korean and Vietnam Wars (Hammond, 2017). Further legislation led to the Veterans' Educational Assistance Program and the Montgomery GI Bill (MGIB). The MGIB provided funding for many FMCSs but did not adequately keep up with the increasing cost of higher education and did not include reservists' benefits. Congress updated the MGIB to include Reservists in 2005 before passing the Post-9/11 Veterans Education Assistance Act in 2008, the most current version of the GI Bill.

The GI Bill provides FMCSs with more benefits than previous legislation, including tuition, fees, a living allowance, and book stipends (Hammond, 2017). The U.S. government has renewed its commitment to servicemen and women by rewarding their service with the opportunity to earn a college degree that leads to viable employment to support the local and global economies. Federal funding for FMCSs has been a significant investment in the U.S. economy since World War II and continues to do so with the GI Bill (Stevens, 2018). Over 700,000 beneficiaries of the GI Bill enrolled in higher education in 2018, indicating a need to understand FMCSs' success rate and inform policymakers and taxpayers about the return on their financial investment (Johnson & Appel, 2020). Specifically, at CCNE, little is known about the FMCS population's associate degree completion rate due to a lack of meaningful statistics.

Although the GI Bill is the most popular military funding program utilized by FMCSs at CCNE, other federal education benefits are available to those who served. The Chapter 31 Veteran Readiness and Employment program (VR&E), formerly known as

Vocational Rehabilitation and Employment, provides education funding for those with a military service-connected disability (U.S Department of Veteran Affairs, 2021). The Chapter 1606 Montgomery GI Bill Selected Reserve (MGIB-SR) program provides education funding for reservists in any military branch (U.S. Department of Veterans Affairs, 2022).

Benefits of Earning an Associate Degree

There are many advantages to FMCSs earning an associate degree at CCNE, including a supportive environment that eases their transition into higher education and civilian life. Graduates have access to higher-paying jobs and can enroll at a bachelor's degree-awarding institution with 2 years of college credit. Belfield and Bailey (2017) reported a significant positive difference in earnings between those who earn an associate degree and those who do not complete their program. These findings indicate that men and women with an associate degree have an average quarterly income of $1160 and $1790 higher, respectively, compared to those who complete 20 college credits or less. Adult students attend CCNE because of the convenience and affordability of this degree-granting institution whose mission is to contribute to the state's economy and prepare graduates for employment in the local workforce.

McCausland et al. (2017) emphasized the value of non-technical skills learned through military service to benefit employers, including critical thinking, leadership, communication, teamwork, and interpersonal skills. Although employers desire non-technical attributes, they also require skills and abilities learned through technical experience and academic learning. CCNE offers many high-demand degree programs

that can benefit FMCSs. A college degree is often needed to apply for civilian

employment, and those with an associate degree benefit from a higher earning potential

than those who do not graduate (Belfield & Bailey, 2017). FMCSs have unique skills and

experiences gained through military service that may be transferable to college credit.

CCNE offers college credit for previous military experience, which could shorten the

time to complete an associate degree. Therefore, an associate degree earned at CCNE can

increase FMCSs ability to find gainful civilian employment in the local economy.

Reasons for Choosing CCNE

The majority of personnel in all five branches of the U.S. military consists of

junior enlisted service members, many of whom do not have a college degree (Zogas,

2017). Many will transition into higher education with hopes of earning a college degree

that will help them secure employment. Community colleges are a good option because

they are convenient and cost-effective and can help FMCSs utilize the skills and abilities

gained through their service to support their academic and lifelong learning.

Life experiences guide the learning needs of many community college students,

which require flexible education options (Levy, 2017). CCNE is attractive to FMCSs due

to its low cost and five convenient campus locations throughout the state that offer day,

evening, and weekend classes to increase access to higher education courses. CCNE

offers the lowest yearly tuition cost of all the higher education institutions within its state,

making it an affordable option for local FMCSs who may not have access to the

maximum military funding program benefits. Cate et al. (2017) reported that the most

significant number of degrees earned by FMCSs were business-related, followed by

STEM majors, liberal arts and sciences, and health professions. CCNE offers associate degree programs within various disciplines that align with FMCSs interests, including business, communications, computer studies, fine arts, liberal arts, health sciences, human services, criminal justice, social services, science, engineering, and technical studies. The VSO provides FMCSs with information on military funding and scholarship programs, peer support services, links to community organizations that help FMCSs transition into civilian life, and information on earning credit for prior learning. FMCSs can earn college credit in their field of study for documented college-level knowledge, training, and work experience gained through their military service experience.

CCNE developed a definition of an educated person that reflects four critical abilities required for all students to support academic outcomes and lifelong learning after graduation. FMCSs often have technical and global experience and soft skills, such as communication, critical thinking, and self-awareness, gained through military experience, contributing to their academic success at a community college (Davis & Minnis, 2017). Therefore, FMCSs may enroll at CCNE with the skills outlined within the four critical abilities because of their service experience, enhancing their ability to complete an associate degree.

Effective communication is the first of the four abilities. It requires students to provide written work that develops ideas within a specific context and communicate through oral and visual presentations and group work. Students will develop critical thinking skills by locating, analyzing, and applying evidence, questioning assumptions, and drawing logical conclusions. They will learn to apply quantitative, mathematical, and

scientific reasoning to solve problems using an evidence-based approach. Finally, students will acquire a global perspective and function in social and professional environments by making reasoned decisions based on cultural and ethical standards, self-awareness, and personal responsibility.

FMCSs often have experience gained through their service related to each of the four critical abilities, making CCNE the right choice for their higher education transition. The Army, Navy, Air Force, Coast Guard, and U.S. Marine Corps provide training for service members to develop technical skills related to their job specialization and soft skills such as teamwork and communication (Davis & Minnis, 2017). Each of the five branches offers training to personnel who must apply the technical knowledge and skills they learned to their jobs in the military. All military branches emphasize ongoing leadership development for service members, focusing on globalization, organizational change, and technological advancement (Kirchner & Akdere, 2017). Leadership skills develop over time with the ongoing integration of education, training, and military experience. Therefore, FMCSs enter higher education with diverse skills, including communication, decision-making, problem-solving, a global perspective, and a sense of personal responsibility (Davis & Minnis, 2017; Zogas, 2017). Knowles's theory of andragogy supports FMCS's experiential learning because it emphasizes the significance of experiences on adult learning (Taylor & Kroth, 2009). CCNE offers an academic curriculum supported by the four critical abilities and andragogical principles, which aligns with the skillset of those transitioning into higher education from military service.

The mission of CCNE is to provide educational opportunities to a diverse adult population of students who can contribute to the local economy and workforce. A significant segment of the student body at CCNE consists of nontraditional learners with different life and work experiences. This population of students includes FMCSs who may require services to support their academic success. Veterans, reservists, and active-duty personnel have different needs due to their circumstances. Veterans are retired from the U.S. military and could have family and employment responsibilities. Reservists may have similar commitments as veteran students, but they serve part-time in the military, resulting in unique challenges. Active-duty students are full-time servicemembers who may also have family responsibilities and require resources that help them achieve their educational goals while serving in the military.

CCNE participates in a federal program called VetSuccess on Campus (VSOC), which provides a VA liaison dedicated to facilitating access to various benefits and services, including information on employment opportunities, medical benefits, mental health and disability, and community resources. VSOC helps FMCSs transition into higher education and prepares them for viable employment after graduation (U.S. Department of Veterans Affairs, 2021). VSOC also provides information on military funding programs, a crucial VA benefit available to FMCSs that provides monies to finance their associate degree at CCNE. The partnership with VSOC helps CCNE facilitate FMCSs' transition into higher education and civilian life with services designed to support their learning and academic success.

Challenges to Academic Success

FMCSs often experience barriers to their ability to persist in higher education, with financial problems being the most significant (Jenner, 2017). Many of these learners lack information about military funding program benefits and how to access them; however, all students in this study received funding benefits. Therefore, this study did not include financial issues as a challenge to academic success as cited in the literature for nontraditional students (Osam et al., 2017). CCNE offers veteran services to assist FMCSs transitioning into higher education. Each campus location has a veteran's services office overseen by a veteran coordinator that provides resources and information about applying for military funding program benefits, advising and counseling, disability services, peer support groups, and links to various external services. The VSOC program makes a VA liaison available to meet with students at each campus to advise about medical benefits and mental health resources. The VA liaison at CCNE can refer FMCSs to vital services at the local VA medical center and community outpatient clinics to access medical and disability services and mental health treatment and counseling.

The VSOC program at CCNE supports all FMCSs academic success by offering various services that meet this diverse group of learners' unique needs. Although CCNE partners with the Department of Veterans Affairs to support FMCSs transition into higher education and academic success, many full-time students fail to complete an associate degree. Because FMCSs may be a subset of the nontraditional population (Johnson & Appel), the nontraditional factors used in previous research (Morrill & Somers, 2020) may predict their academic success. Therefore, this study used the nontraditional factors

of age, gender, and ethnicity as predictors for earning an associate degree at CCNE for FMCSs.

Implications

Military funding programs provide federal monies for FMCSs to help relieve the financial burden of pursuing their education goals. Although CCNE offers services and programs for FMCSs, the graduation rate for first-time, full-time students is 7% (NCES, n.d.). Identifying predictors that affect FMCS academic success will help educators make research-based decisions that can improve the degree completion rate for this population of learners. If age, gender, or ethnicity predict successful completion of an associate degree at CCNE, existing services and programs may require modification. Based on this study's results, new college policies could improve service delivery and program development targeting FMCSs. Modifying academic advising procedures could help staff provide the necessary guidance to FMCSs about degree programs based on their service-related experience. New guided pathways tailored to students with military experience could improve their ability to complete an associate degree at CCNE. Developing an FMCSs orientation could help guide learners to the services and resources needed to complete their degree program.

This study's findings are important for all stakeholders, including CCNE, state and federal veteran's organizations, and taxpayers, and contribute to the academic literature. CCNE is accountable to government entities and taxpayers because it receives funding earmarked for FMCSs to attain their education goals. Using the data collected on FMCSs will help educators understand the needs of this student population. Students who

served in the U.S. military enroll at CCNE to earn a degree to help them find employment in the local economy and support their transition into civilian life. This study contributes to positive social change by suggesting how data collected at the local site led to policy recommendations to improve FMCS academic success. Because FMCSs may be a subset of the nontraditional student population (Johnson & Appel, 2020), they may have the same predictors of success and benefit from programs designed for nontraditional learners. If not, this population may be a unique group with different predictors and benefit from a new institutional policy focused on their academic success.

Military-connected learners also have unique factors due to their experiences (Morrill & Somers, 2020) which may affect their academic success. Knowles's theory of andragogy emphasizes the significance of adult experiences on their learning (Taylor & Kroth, 2009) which suggests that predictors for FMCS academic success may be different than for nontraditional students. Therefore, changes to education practice and policy based on the uniqueness of the FMCS population may improve their academic success. Mercer et al. (2014) described an initiative developed by Kansas State's College of Education that provided a framework that prepared faculty and staff to serve FMCSs in a college setting. This educational initiative included professional development for faculty and modifications for curricula and support services to address FMCS issues. Mercer et al. (2014) also suggested conducting research focused on preparing faculty and developing policies to meet the educational needs of the FMCS population. Garrity (2017) provided recommendations based on her study of FMCSs at a private institution in New York that focused on enrollment patterns and the use of military program funding.

She found several predictors of program completion and persistence for FMCSs that differ from the literature on the civilian student population and recommends future research focusing on these learners' unique factors. This project study adds to the academic literature and provides other community colleges with best practices to improve FMCS academic success.

Summary

The problem addressed through this study is the low graduation rate of FMCSs at CCNE. Although the college provides services and programs dedicated to this population of students, many do not complete their academic programs. Because the graduation rate included only 10% of FMCs (according to the interim director of OIRA), most of this population's graduation rate is unknown. Although the OIRA collects data yearly, it is not used to predict the FMCSs academic success, indicating a gap in practice. Because FMCSs share many characteristics with the nontraditional population (Johnson & Appel, 2020), this study used nontraditional student factors determined as predictors of success from previous research. If this study shows that FMCSs are a subset of nontraditional students, they may benefit from the services and guided pathways designed for nontraditional learners. These learners also have unique factors due to their military service. If results show FMCSs are not a subset of nontraditional students, they may be a unique group with different predictors that benefit from modified curricula and institutional policy focused on their success.

Many stakeholders have a vested interest in FMCSs academic success because military funding programs are taxpayer-funded. CCNE, government agencies, and

taxpayers need assurance of a positive return on an investment designed to benefit

servicemembers' transition into civilian life and provide an educated workforce for the

economy. Understanding the effect of nontraditional factors on FMCS academic success

led to this policy paper's recommendations to improve FMCS success and address a gap

in practice at CCNE. This study contributes to social change by offering improvements

concentrated on academic success at CCNE and serves as a best practice for other

community colleges that enroll FMCSs.

Section 2: The Methodology

Research Design and Approach

The purpose of this quantitative study was to measure the effects of the nontraditional factors age, gender, and ethnicity on completing an associate degree within 6 years at CCNE for FMCSs. For this study, I used a correlational quantitative research design because such a design is predictive and does not measure the effect of an intervention. A logistic regression analysis using SPSS (Version 27) predicted the effect of age, gender, and ethnicity on the associate degree completion rate for FMCSs to address the local problem of a low graduation rate of 7% for first-time, full-time students. Previous research on FMCSs has frequently used nontraditional factors such as age, gender, and ethnicity to predict success (Morrill & Somers, 2020). Therefore, in this study, I used age, gender, and ethnicity to predict FMCS success in earning an associate degree at CCNE

Setting and Sample

Population

For this study, I used deidentified data on the population of 550 men and women who are military-connected students, defined as veterans, reservists, and active-duty personnel. All participants received benefits from military funding programs and enrolled full- or part-time in an associate degree program at CCNE in September 2013 and graduated by May 2019. The year 2020 is excluded because of the unusual circumstances of the COVID-19 pandemic.

Sampling Strategy

The census sample means that no one was excluded from the population. All available deidentified data were used for FMCSs enrolled in an associate degree program at CCNE in the September 2013 fall semester. This study used deidentified secondary data for FMCSs enrolled in the September 2013 fall semester to allow a 6-year timeframe and eliminate the 2020 academic year due to the COVID-19 pandemic. Those who transferred out of CCNE to another educational institution between the September 2013 fall semester and the May 2019 spring semester before graduating with an associate degree were considered incomplete because their academic success is unknown.

Sample Size

Using Cohen's (1992) analysis of population size for multiple regression, the minimum sample size for this study, using a power of .80 for an alpha of .05 and a medium population effect size with three variables (factors), is 76 participants. This study included the entire population of FMCSs due to the low number of military-connected females and the need for adequate representation from each ethnic group. There was no random selection of participants. The sample included all military-connected students who receive military funding program benefits.

Participant Eligibility Criteria

The inclusion criteria were all FMCSs, veterans, reservists, and active-duty personnel enrolled full- and part-time in an associate degree program at CCNE in the September 2013 fall semester.

Recruitment of Participants

Because this study used archival data, no recruitment of participants was required. The OIRA research analysts at CCNE collected the archival data for this study. All participants were FMCSs, defined as veterans, reservists, and active-duty personnel enrolled in an associate degree program in September 2013.

Characteristics of the Selected Sample

The selected sample comprised all male and female FMCSs, including veterans, reservists, and active-duty personnel who enrolled full- and part-time in an associate degree program at CCNE in September 2013.

Instrumentation and Materials

Data Collection Tools

This study does not require a data collection tool and used archival data collected annually by the OIRA research analysts at CCNE.

Location of Raw Data

The OIRA research analyst deidentified all raw data and stored it on CCNE's secure OneDrive server. I accessed the deidentified raw data via an email link sent to me by the OIRA research analyst. I will maintain the deidentified data on a password protected drive for at least 5 years.

Data Collection and Analysis

Required Data Collection

Data included nontraditional factors for FMCSs enrolled in the September 2013 fall semester and graduated with an associate degree by May 2019. Nontraditional factor

data collected included age, gender, and ethnicity. This study included full and part-time

FMCSs and defined the dependent variable as completing an associate degree at CCNE

within 6 years. The year 2020 was excluded because of the unusual circumstances of the

COVID-19 pandemic.

Data Collection Processes

This project study used deidentified, secondary data collected by the OIRA

research analyst at CCNE to ensure anonymity. I downloaded the data into a Microsoft

Excel spreadsheet and then uploaded them into SPSS (Version 27) to start the analysis.

Gaining Access to Archival Data and Special Permission

The OIRA research analyst collected the archival data on FMCSs and removed all

identifying information before entering the information into an Excel file. I requested

approval from the local site to collect the data for this study and institutional review

board (07-13-21-0676091) approval from Walden University to oversee the secondary

analysis of the data collected under the oversite of CCNE.

Nature and Scale of the Variables

The factors of age, gender, and ethnicity are the independent variables. Age is a

continuous variable. Gender and ethnicity are categorical variables. The OIRA research

analyst at CCNE collects data on ethnicity using eight distinct categories defined by the

U.S. Department of Education. This study used the White and Hispanic/Latino ethnicity

categories because they account for 84% of the student population. The Other category

included Black or African American, Asian, Native American or Alaskan Native, two or

more races, race/ethnicity unknown, Native Hawaiian or other Pacific Islander, and non-

resident alien because they collectively comprise only 16% of the total student body. The dichotomous dependent variable is successful or unsuccessful completion of a 2-year associate degree within 6 years at CCNE.

Analysis Related to the Research Questions

A logistic regression analysis identified which of the nontraditional factors, age (continuous), gender (categorical), and ethnicity (categorical), were significant predictors for completing a 2-year associate degree at CCNE within 6 years. A binomial logistic regression was performed to ascertain the effects of the independent variables (age, gender, and ethnicity) on the dichotomous dependent variable (the likelihood that FMCSs complete an associate degree within 6 years) (Laerd Statistics, 2020).

The results of the analysis answered this study's research questions, which were as follows:

RQ1: What is the effect of age on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

RQ2: What is the effect of gender on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

RQ3: What is the effect of ethnicity on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

Assumptions, Limitations, Scope, and Delimitations

Assumptions

There were facts assumed to be accurate but not verified. The assumptions were related to the data collection. Primarily, it was assumed that the OIRA research analyst provided an accurate dataset based on the variables requested.

Limitations and Scope

Some students transferred the college credits they earned at CCNE to another institution. These students were considered incomplete because this study focused on associate degree completion at CCNE.

Delimitations

CCNE is a large community college with 2 urban campuses and a diverse student body. Results from this study may not be transferable to smaller institutions or those in rural settings. CCNE identifies FMCSs during enrollment and directs them to the VSO for military funding program resources and services to support their academic success. The college also supports nontraditional students through advising and counseling, a student success center, and disability and career services. CCNE has extensive student services for nontraditional and FMCSs, which may influence the results of this study. Therefore, the results of this study may not apply to other colleges without similar services.

Protection of Participant's Rights

The OIRA research analyst at CCNE removed all identifying student information from the archival data for this study to ensure anonymity. The data were collected as part

of the normal CCNE operations and stored electronically on a secure server. Therefore, participants were not at any risk associated with this study.

Data Analysis Results

The following sections describe this study's population, the testing of binomial logistic regression assumptions and results, and the limitations of the research findings. This study's results align with the problem, theoretical framework, and research questions.

Data Set Description

The population size was 96 FMCSs who enrolled full- or part-time in the fall of 2013. This study included all FMCSs, which exceeded the minimum sample size necessary of 76 as defined by Cohen (1992) for multiple regression using a power of .80 for an alpha of .05, and a medium population effect size with three variables (factors). Of the 96 FMCSs, 19 completed an associate degree, and 77 did not, resulting in a 19.8% graduation rate. The mean age of the population is 24.64, with a standard deviation of 10.25. Figure 1 shows a histogram of the age distribution of 17 to 59 years and associate degree completion. FMCSs who completed an associate degree had a mean age of 23.84, with a standard deviation of 9.83. FMCSs who did not complete an associate degree had a mean age of 24.83 years, with a standard deviation of 10.402. Figure 2 shows the percentage of FMCSs who completed and did not complete an associate degree by gender. Figure 3 shows the percentage of FMSs who completed and did not complete an associate degree by ethnic group.

Figure 1

Percentage of Associate Degree Completion vs. Noncompletion by Age
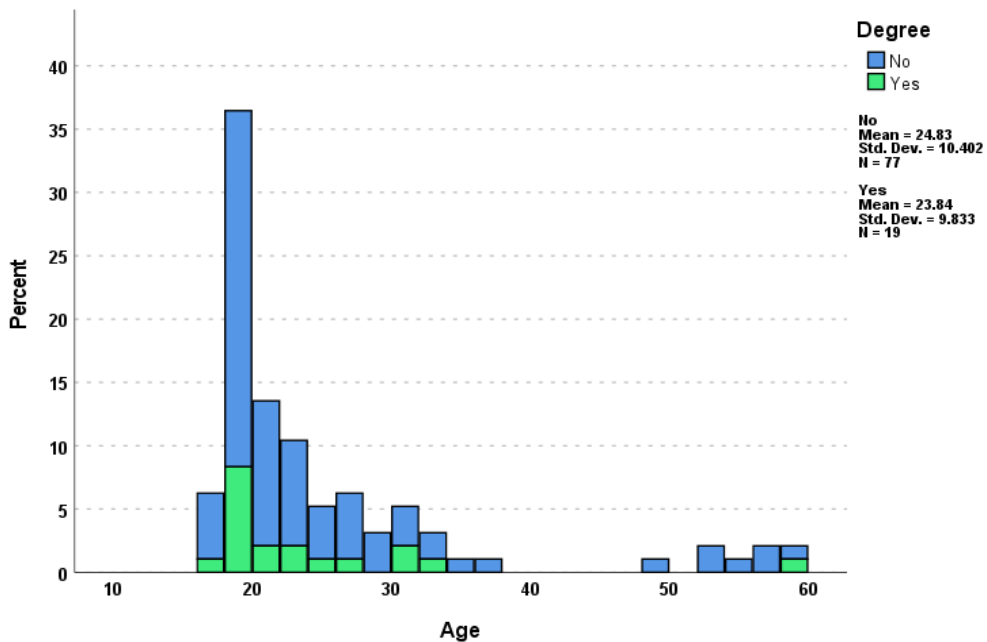
Figure 2

Percentage of Associate Degree Completion vs. Noncompletion by Gender
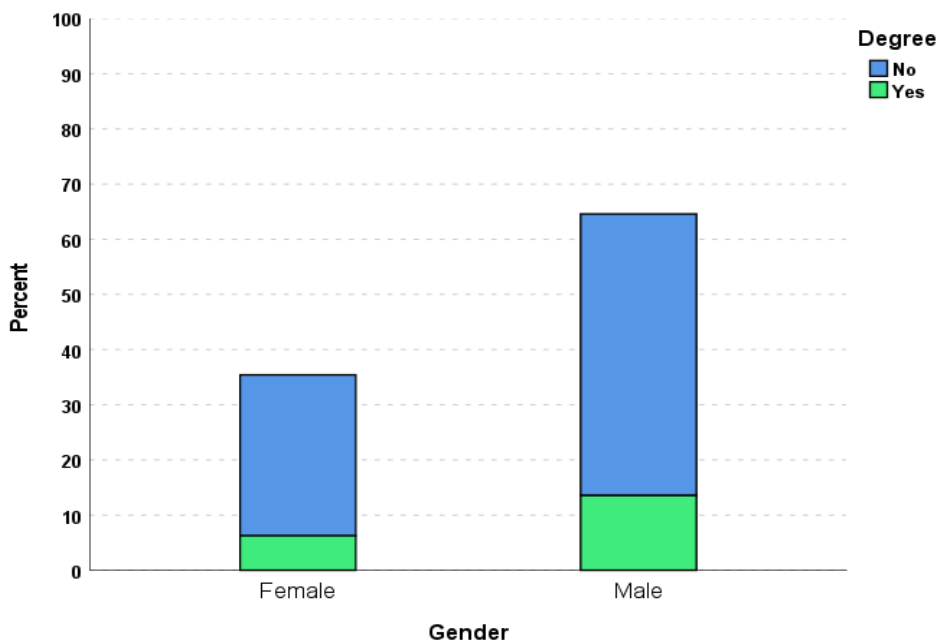
Figure 3

Percentage of Associate Degree Completion vs. Noncompletion by Ethnicity
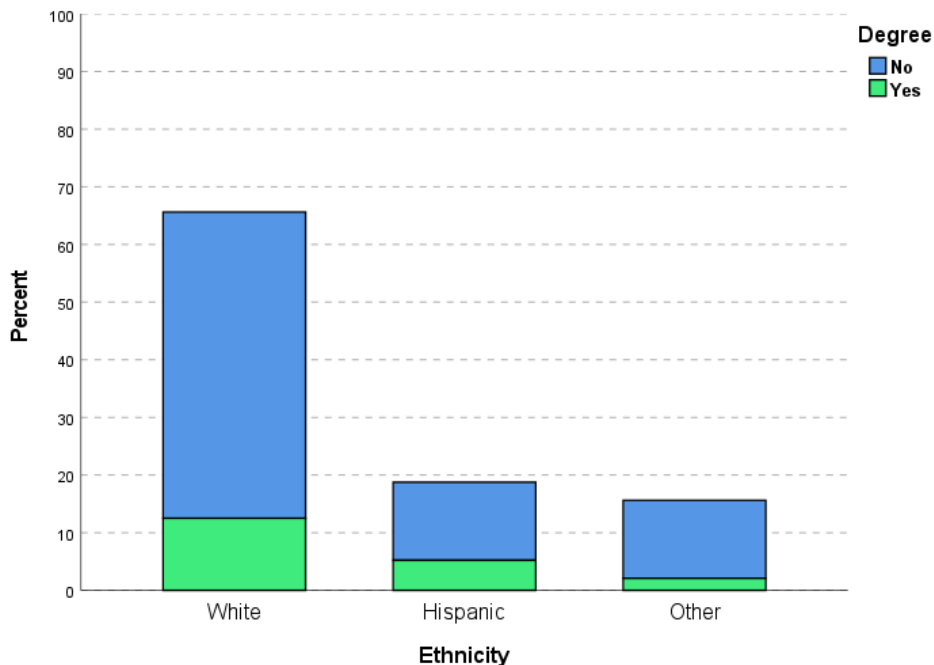
Testing Binomial Logistic Regression Assumptions

The data were retrieved from CCNE's secure OneDrive server and imported into SPSS (Version 27) for analysis. Binomial logistic regression was used to determine which factors predict associate degree completion for FMCSs. The seven statistical assumptions for binomial logistic regression indicated that the data could be analyzed using this statistical test because all the assumptions were met (Laerd Statistics, 2020).

Assumption 1: The Dependent Variable is Dichotomous

The dependent variable is dichotomous and is defined as completing an associate degree (yes or no).

Assumption 2: There Is at Least One Continuous or Nominal Independent Variable

The independent variable age is continuous, and the remaining 2, gender and ethnicity, are nominal.

Assumption 3: There Is Independence of Observations

There is independence of operations because the categories of the dichotomous dependent variable and the nominal independent variables are mutually exclusive and exhaustive. The dichotomous variable, completion of an associate degree, is yes or no. For the independent variables gender and ethnicity, each participant is male or female and assigned to only one ethnic group.

Assumption 4: There Is a Minimum of 15 Cases per Independent Variable

There are 96 cases for this study, with at least 15 cases for each independent variable, age, gender, and ethnicity, as shown in Table 1. Of the 96 FMCS students, there were fewer than 15 Black students. Therefore, I removed them as a distinct ethnic group and included them in the group labeled Other.

Table 1

Categorical Variables Frequency

Variable	Frequency
Gender	
Male	62
Female	34
White	63
Hispanic	18
Other	15

Assumption 5: There Is No Linear Relationship Between the Continuous Independent

Variable and the Logit Transformation of the Dependent Variable

Linearity of the continuous variable, age, with respect to the logit of the

dependent variable, associate degree completion, was assessed via the Box-Tidwell

procedure. Based on this procedure (Box & Tidwell, 1962), the continuous independent

variable, age by the natural log transformation of age, was not significant, $p = .81$, as

shown in Table 2. Therefore, there is no linear relationship between the continuous

independent variable and the logit transformation of the dependent variable.

Assumption 6: The Data Does Not Show Collinearity

Multicollinearity exists when at least 2 independent variables have a linear

relationship with each other. Because this study has only one continuous independent

variable, multicollinearity does not exist (Park, 2013).

Assumption 7: There Must Be No Significant Outliers

Casewise Diagnostics using SPSS (Version 27) were used to determine the

presence of outliers. Cases with a standardized residual greater than 2.5 indicate outliers

may need to be eliminated from the analysis (Laerd Statistics, 2020). Because no cases

had a standardized residual greater than 2.5, SPSS did not produce a Casewise plot.

Therefore, there were no significant outliers.

Binomial Logistic Regression Results

Binomial logistic regression was performed to ascertain the effects of age, gender,

and ethnicity on participants' likelihood of completing an associate degree. The logistic

regression model was not statistically significant, $\chi^2(5) = 1.19$, $p = .88$. Because the *p*

value for all the predictors was greater than .05, the null hypotheses were accepted where age, gender, and ethnicity are not predictor variables for FMCSs completing an associate degree within 6 years, as shown in Table 2. In this study, the Hosmer and Lemeshow test was applied to ascertain the overall model fit (Mardisetosa et al., 2020). The results of the Hosmer and Lemeshow test, a chi-square goodness-of-fit test for logistic regression, were $\chi^2(8) = 7.06$, $p = .53$. The model is a good fit because the p-value was greater than .05. The Nagelkerke R^2 determination coefficient determined the variability of the dependent variable (Mardisetosa et al., 2020), Nagelkerke $R^2 = .02$. Nagelkerke R^2 was used because the range of values is between 0 and 1 (Smith & McKenna, 2013). The independent variables, age, gender, and ethnicity, explained 2% of the dependent variable variation. The remaining 98% was influenced by factors not included in this study.

Table 2

Variables in the Equation

Variable	B	SE	Wald	df	p	Exp(B)	95% CI for *OR*	
							Lower	Upper
Age	.00	.03	.02	1	.89	.99	.94	1.05
Gender	-.14	.56	.06	1	.80	.87	.29	2.61
Hispanic	-.46	.63	.55	1	.46	.63	.19	2.14
Other	.38	.86	.19	1	.66	1.50	.27	7.92
Age x ln (Age)	.04	.15	.06	1	.81	1.04		

Note. CI = Confidence interval.

Limitations of Research Findings

This study's research findings have limitations. Military personnel move 2 to 3 times per year (United Service Organizations, 2018) and may relocate to any area within the United States and complete their academic program in another state of residence. This

study focused on FMCSs' graduation rate at CCNE and did not track the success of students who transferred to other institutions.

Summary

The population for this study included 96 full- and part-time FMCSs between 17 and 59 years old, with a mean age of 24.83 years old. Only19.8% of all full and part-time FCMSs completed an associate degree compared to 30% completion for the total population of CCNE's first-time, full-time students. This study's population was approximately 65% males and 35% females, where 21% of males and 18% of females completed an associate degree. The participants' ethnicity groupings were 66% White, 19% Hispanic, and 15% Other. The percentage of associate degrees completed by ethnicity was 19% of Whites, 28% of Hispanics, and 13% in the Other group.

The data analysis results show that the factors age, gender, and ethnicity are not significant predictors for FMCS associate degree completion; therefore, the null hypotheses were accepted. There were some limitations to the research findings. This study's results show that FMCSs are a unique group. Because many FMCSs do not complete their associate degree, institutional change is needed to improve their academic success. Effective organizational change in higher education requires an evidence-based institutional policy that informs best practices and improves student success (Helgetun & Menter, 2020). I met with my committee, who agreed that a policy recommendation paper is the most appropriate project based on this study's findings. This policy paper recommends a college-wide approach to creating a safe and inclusive learning environment for FMCSs as a unique group to improve their academic success.

Section 3: The Project

Although CCNE offers a wide range of services for FMCSs, a change to the learning environment may be needed to improve this population's academic success. This study's results show that FMCSs are a unique group that may require different services to support their success. This project is a policy paper with recommendations to create a safe, inclusive learning environment that supports FMCS academic success. Professional development for all college personnel is recommended to promote a college-wide understanding of FMCSs' needs and participation in supporting their academic success. A military-connected student orientation will introduce students to college services, faculty, and staff dedicated to preparing them for academic rigor and improving their college experience. A recommendation for an interdepartmental research committee will encourage faculty collaboration on projects that inform teaching strategies for a learning-friendly environment for FMCSs. Current research suggests FCMSs tend to be older than traditional-aged students (Borsari et al., 2017; Johnson & Appel, 2020), but this study's dataset showed that only 17.7% of the study's participants were 25 years or older. Therefore, one of this policy paper's recommendations is to recruit FMCSs greater than 24 years old.

Change that will significantly affect student performance requires an institutional policy outlining recommendations that reflect the unique needs of FMCSs (Durazzi, 2019; Ellegood et al., 2019; Wang & Degol, 2017). FMCSs may share some characteristics with nontraditional students, but they have unique experiences due to their military service. All FMCSs received federal military education benefits and have served

or are currently serving in the U.S. military. This fact and their low graduation rate of 7% suggest the need for systemic change at CCNE. Because FMCSs permeate the college population and are often unrecognizable, an institutional policy must engage all CCNE personnel to improve FMCS learning and academic success. This study led to this policy's recommendations to create a safe and inclusive learning environment to improve FMCS success. This section includes the project description and goals, rationale, evidence-informed literature review, project description, project evaluation plan, and implications. This policy paper offers recommendations based on current research and focuses on improving the FMCS graduation rate at CCNE.

Project Description and Goals

Project Description

This project is a policy paper recommending that the CCNE administration adopt an institutional evidence-based policy to improve FMCSs' academic success. Improving student outcomes depends on implementing a policy that requires college-wide participation (Durazzi, 2019; Ellegood et al., 2019). Because this study's results showed that the predictors for FMCSs were not the same as for nontraditional students, current literature citing initiatives to improve this population's academic success was used to develop a policy paper focused on FMCSs success. The policy's recommendations include a college-wide approach to creating a safe and inclusive learning environment to improve FMCS success through professional development, a military-connected student orientation, an interdepartmental research committee, and recruitment strategies to increase enrollment and improve diversity. Tinto's institutional departure model provides

the framework for this policy paper, which posits that students who feel integrated into the college community are more successful. This policy's recommendations will follow CCNE's guidance outlined in the institution's development and maintenance of college policies.

Project Goals

This policy recommendation paper has three goals to communicate to the CCNE administration:

- explain how this study shows that FMCSs may be a unique group requiring different services

- show how institutional policy is needed to have a positive effect on FMCS success throughout the college community

- offer evidence-based policy recommendations for a safe and inclusive learning environment to improve FMCS academic success and promote social change

This study showed that nontraditional factors were not significant predictors of FMCSs' academic success, suggesting they are a unique group. Although CCNE offers various services to support and promote learning, the graduation rate for FMCSs is low. The change needed to improve student performance requires a new college policy (Durazzi, 2019; Ellegood et al., 2019). FMCSs permeate the CCNE student population and are not always recognizable. This policy paper provides recommendations based on current research to create a safe and inclusive learning environment to improve the associate degree graduation rate for FMCSs.

Professional development required for all college personnel will promote understanding of FMCS's unique characteristics and encourage participation in improving FMCS success. A mandatory military-connected student orientation offered before each semester will help FMCSs transition into the college environment and introduce them to faculty, staff, and services that will support their success. An interdepartmental research committee will encourage faculty to work on projects that improve teaching and learning strategies for FMCSs, inform the literature, and offer suggestions for future research. Although current research suggests FMCSs tend to be older than traditional students (Borsari et al., 2017; Johnson & Appel, 2020), the dataset for this study showed that only 17.7% were over 25 years old. Actively recruiting older FMCSs will improve diversity, increase learning opportunities, and create a financial benefit for CCNE. Older FMCSs can benefit from enrolling in one of CCNE's associate degree programs to prepare them for gainful employment in the economy. Higher FMCS enrollment will bring additional federal funding to the college, which can support educational programs and services and offset any cost to this policy paper's recommendations.

Rationale

Durazzi (2019) and Ellegood et al. (2019) emphasized that significant change leading to improved student outcomes requires institutional policy. College policies must outline the strategic goals with stakeholder input to ensure sustainable change (Harrison, 2018; Klofsten et al., 2019). Because FMCSs can enroll in any academic program offered by CCNE and are often unrecognizable, improving their academic success requires a new

policy that involves the entire college community. A new institution policy requiring college-wide participation will support and sustain a change focused on improving student success (Ellegood et al., 2019; Levin & García, 2018).

Effective organizational change requires policies that use scientific evidence to inform best practices (Helgetun & Menter, 2020). This policy paper offers evidence-based recommendations that will encourage engagement of the college community to improve FMCS diversity, inclusion, and academic success. Current research on transition challenges and strategies to support FMCSs in higher education (Adams-Johnson et al., 2019; Borsari et al., 2017; DeCoster, 2018; Kastle et al., 2019; Kruse et al., 2018; Mercer et al., 2014; Sherbert et al., 2017; Williams-Klotz & Gansemer-Topf, 2018) provided the foundation for this policy recommendation paper.

The low graduation rate of FMCSs at CCNE was the impetus for this study. FMCSs receive federal monies to remove the financial burden of getting a college degree to focus on their studies (Bergman & Herd, 2017). These students often choose a community college because they are convenient and offer flexible learning options (Levy, 2017). Although CCNE provides services to support FMCS, their graduation rate is only 7%. Furthermore, the data collected yearly on FMCSs has not been used to inform college policy that addresses their low success rate. This policy paper fills a gap in practice by offering evidence-based recommendations for a new institutional policy that utilizes a college-wide approach to creating a safe and inclusive learning environment that will support FMCS's academic success.

Review of the Literature

A review of the literature accessed through the Walden University digital library and Google Scholar justified this policy recommendation paper. The literature search focused on higher education policy development, recommendations and implementation, culturally responsive curriculum, and policies that support FMCSs' academic success. Databases used in the literature search included Education Resource Information Center (ERIC), Taylor and Francis Online, Education Source, Academic Search Complete, APA PsychNet, ScienceDirect, Gale Academic OneFile Select, Emerald Management, and SAGE Journals. Keywords used include but are not limited to *higher education policy and change, higher education reform, higher education or community college policy development, higher education policy recommendation, higher education stakeholders and communication, institutional change, organizational change, stakeholder communication, higher education, and program evaluation, evaluation of community college policy, evaluation of professional development in higher education, best practices in academic program review,* and *outcome-based education.* The themes used to categorize the literature are justification for a policy paper, theoretical justification of a policy recommendation paper, effectiveness of higher education policy development, use of evidence in policy development, significance of stakeholder communication, and evaluation of policy recommendations.

Justification for a Policy Paper

Institutional change requires evidence-based policies that inform best practices (Bojtor & Bozsó, 2020; Medina, 2018). Gulson and Sellar (2019) demonstrated that

education policy based on data could influence change. Quantitative data has become as important to student performance as teaching strategies, assessments, and curriculum design (Gulson & Sellar, 2019). Data-driven research methods offer accurate and scientifically objective information for education policymakers and can influence the development of interventions for problems in education (Williamson & Piattoeva, 2019). This study's analyses used quantitative data to inform the policy paper's recommendations to create change by improving FMCS's academic success at CCNE.

Policymakers must consider the needs of a diverse student body so that all students can succeed (Morina, 2017). Higher education leaders must support policy design that provides a professional development framework for college personnel based on diversity and inclusion and offers opportunities for educators to contribute to research literature (Czerniawski et al., 2017). This policy paper recommends professional development for the CCNE community to increase their understanding of the FMCS population and an interdepartmental research committee that supports work on projects focused on FMCSs. These recommendations and a military-connected student orientation will promote a safe and inclusive learning environment for FMCSs at CCNE.

Theoretical Justification of a Policy Recommendation Paper

This policy recommendation paper is needed to improve the academic success of FMCSs at CCNE. Effective higher education policy requires a theoretical framework that supports the institution's goals (Harrison, 2018). Furthermore, understanding the need for organizational change is fundamental in driving policy development and can positively affect student performance (Ellegood et al., 2019; Pincus et al., 2017). Tinto's

institutional departure model is a theory that explains how pre-entry attributes such as skills, abilities, college experiences, and social integration affect student academic achievement in higher education (as cited in Wilson, 2005, pp. 246-248).

Evidence cited by Tinto (1993) suggested that students who integrate into college academic and social life have higher retention and graduation rates. Therefore, when students feel like they fit into the college community, they are more likely to complete their degree programs. Strategies and interventions based on the factors identified in Tinto's theory can improve the student graduation rate. For instance, community college students were more likely to feel integrated into the college community and persist if they had experiences with faculty who appreciated their diversity (Barnett, 2011). Schneider and Preckel's (2017) research showed that increasing faculty social interactions with students were strongly associated with academic achievement. Therefore, professional development should introduce teaching strategies that focus on improving social interactions in the classroom. One of this policy paper's recommendations is for professional development to educate the CCNE community about the diverse FMCS population and teaching methods and strategies to improve the graduation rate.

Tinto's (1993) institutional departure model explains how previous skills and abilities can affect students' academic achievement. FMCSs can earn college credit for their military experience, shortening their time to earn a college degree. Wilson (2005) found that competency-based assessments and a more interactive and comprehensive student orientation introduced students to basic college information, academic services, and social support systems and improved graduation rates. This policy paper recommends

a military-connected student orientation to welcome students to the college community and support their academic success. The orientation will introduce students to CCNE's educational programs, faculty and staff leaders, veterans services available on campus, and competency-based assessments to help FMCSs earn college credit for the skill and abilities learned from military service.

This policy paper recommends an interdepartmental research committee to work on projects related to FMCS success, such as teaching strategies, counseling, leadership, student affairs, and adult education in the military. Research is crucial to understanding the factors that affect FMCSs' academic success and how to prepare educators with the most effective teaching methods (Sherbert et al., 2017). A collaborative team approach will contribute to the literature on improving FMCS success, provide recommendations for future studies (Sherbert et al., 2017), and inform best practices focused on integrating FMCSs into the college community.

This policy paper offers recommendations using Tinto's (1993) institutional departure model as a foundation to inform the sustainable change needed to improve FMCS academic success. Sustainable change relies on frequent collaboration and communication amongst stakeholders to develop best practices based on policy (Small et al., 2018). Best practices must be embedded into the organizational culture to ensure buy-in from all stakeholders (Klofsten et al., 2019; Kruse et al., 2018; Sherbert et al., 2017). Furthermore, policy recommendations can motivate college personnel to meet institutional goals of excellence in teaching and research and improve student outcomes (Christensen et al., 2020). This policy's evidence-based recommendations address the

need for change at CCNE by promoting a college-wide approach to understanding the needs of FMCSs and improving their academic success.

Effectiveness of Higher Education Policy Development

Effective and lasting change in higher education requires institutional policies outlining recommendations that lead to desired outcomes to significantly affect student performance (Durazzi, 2019; Ellegood et al., 2019). Strategic outcomes must be well defined to achieve stakeholder goals and ensure effective initiatives that lead to sustainable change (Harrison, 2018; Klofsten et al., 2019). Institutional policies should focus on the needs of a diverse but unique student population to promote their academic success (Wang & Degol, 2017) and use a collaborative approach with stakeholders' input to recommend best practices (Kruse et al., 2018; Sherbert et al., 2017). Evidence-based policies effectively inform stakeholders about the need for change (Shannon, 2019). This study's research suggests that FMCSs may be a unique group that requires services that differ from the civilian student population. CCNE policy-makers, practitioners, staff, students, and representatives from external organizations that support the FMCS population will provide diverse perspectives for this policy's recommendations focused on FMCS success. Communication with these internal and external stakeholders will inform this policy paper's recommendations for best practices and ensure buy-in. Each recommendation is based on current research and focuses on a college-wide approach to implementing the changes needed to improve FMCS success.

Levin and García (2018) provided an example of an effective policy that increased the graduation rate at a group of New York City community colleges. The

researchers showed how the new policy transformed the college's efforts to promote students' academic success and influenced a positive social change in higher education. This policy paper offers evidence-based recommendations that are low to no cost and may improve FMCS's success rate. Therefore, implementing a new policy based on this paper's recommendations may significantly affect FMCS's academic success resulting in social change at CCNE.

Use of Evidence in Policy Development

Improving FMCS academic success at CCNE will require a new policy based on current research. Effective organizations rely on research-based policies to inform their institution's best practices, leading to positive student outcomes and long-term change (Bojtor & Bozsó, 2020; Medina, 2018). New policies based on research will encourage stakeholders to support changes (Parkhurst, 2017). Some institutions use research to inform practice but not policy, which is not an effective way to use this evidence (Carrier, 2017; Helgetun & Menter, 2020). Therefore, scientific evidence should inform education policy and best practices to address the need for sustainable social change.

Effective policies that lead to best practices use high-quality evidence communicated to stakeholders (Gorard et al., 2020). Sharing research results with internal and external partner stakeholders will help them understand how evidence influences education policy. Cheeseman et al. (2019) recommend that researchers work collaboratively with administration, faculty, staff, and higher education policy developers to address gaps in the literature and inform professional practice. Communication will help stakeholders understand the evidence used in policy development and encourage

buy-in for the recommended best practices (Gorard et al., 2020). This policy paper offers evidence-based recommendations based on stakeholder input to address the problem that FMCS's graduation rate is low compared to their civilian counterparts. Implementing a new college policy based on this paper's recommendations will inform best practices and future research on creating a safe and inclusive learning environment for FMCSs that will lead to sustainable social change.

Significance of Stakeholder Communication

Policies that transform student outcomes require collaboration with internal and external college stakeholders (Small et al., 2018) and consider the college community's values (Hammond, 2017). CCNE has services to support FMCS's demonstrating the college's commitment to this population of learners, but their low graduation rate indicates a need for change. Institution policy that requires a college-wide collaborative effort can bridge the gap between educational goals and student learning, resulting in positive outcomes (Pedersen et al., 2017). Implementation of this policy paper's recommendations will require stakeholder communication and engagement for CCNE to provide a safe and inclusive learning environment that promotes FMCS success.

Evidence-based policy recommendations should reflect local professional practices and practitioners' experience to gain buy-in from internal stakeholders (Hammond, 2017). Communication with CCNE administrators, faculty, staff, and students will provide valuable input for this policy paper's recommendations. Furthermore, external partners' support of policy recommendations can lead to positive outcomes (Klofsten et al., 2019). CCNE has relationships with partner organizations

dedicated to FMCSs' success, including a local VA medical center, Student Veterans of America, and the state Veteran's Affairs office. A broad representation of all stakeholders will increase buy-in and lead to more effective recommendations and commitment to policy outcomes (Klofsten et al., 2019; Kruse et al., 2018; Sherbert et al., 2017). Therefore, this policy paper recommends a college-wide collaborative effort utilizing input from all internal and external stakeholders to improve FMCSs' academic success at CCNE.

Evaluation of Policy Recommendations

Implementing a new policy at CCNE based on this policy paper's recommendations offers a college-wide approach to improving FMCS success. This policy paper's evaluation plan will determine whether the recommendations affect FMCS's learning outcomes and graduation rates. A practical evaluation plan must focus on the learners and the expected learning outcomes within the organizational and cultural context (Lumino & Gambardella, 2020). This policy paper's evaluation plan describes methods for evaluating the recommendations for professional development, a military-connected student orientation, an interdepartmental research committee, and an initiative to recruit older FMCSs.

College policies should include a plan to evaluate the effectiveness of professional development (Al-Naabi et al., 2021). This policy paper's evaluation plan for professional development consists of an attendance and learning assessment survey to confirm policy compliance, assess learning, and inform future course offerings. Borsari et al. (2017) reported that FMCSs want services, such as orientations, that target their needs,

but there is often a lack of evaluation for these programs. Therefore, this policy paper includes an evaluation plan for the military-connected student orientation using an assessment to confirm attendance, assess learning, and inform proposed program changes. The evaluation plan for the interdepartmental research committee will include three commonly used elements as reported by Hanover Research (2012); an internal self-study, an external evaluation, and a comprehensive review resulting in an action plan. This policy paper's recommendation for a college-wide approach to understanding military-connected student culture and needs is critical for recruitment efforts and increasing graduation rates (Bergman & Herd, 2017). The recruitment initiative will require periodic evaluation of student enrollment each semester to determine whether recruitment methods are effective. The overarching goal of the implemented policy is to provide a safe and inclusive learning environment that will improve FMCS's academic success. Assessment of the policy's overall effectiveness will require a review of the graduation rate 2 years after enforcing the policy recommendations and yearly for an additional 4 years.

Project Description

Policy Recommendation Paper

FMCSs access taxpayer-funded education benefits and are often considered part of the nontraditional student population (Johnson & Appel, 2020; Morrill & Somers, 2020). Although CCNE provides services and resources to support these learners, the graduation rate for first-time, full-time students is 7%. This study's research showed that nontraditional factors were not significant for this population, suggesting they are a

unique group requiring services focused on their needs. This policy paper offers recommendations using a college-wide approach to creating a safe and inclusive learning environment to improve FMCS's academic success and promote sustainable social change at CCNE.

Recommendation 1: Offer Professional Development

This policy paper recommends that all college personnel participate in evidence-based professional development that promotes college-wide awareness about military culture, effective advising, counseling techniques, and teaching strategies to improve academic success. The Green Zone Initiative (Kastle et al., 2019), developed at Fort Hays State University and Kansas State Universities K-State initiative (Mercer et al., 2014), can be used as templates to build a comprehensive professional development program for CCNE to build awareness and commitment to improving FMCS success. Both initiatives resulted from a collaboration of academic departments, the college VSO, counselors, and local veteran services organizations external to the college. These professional development training opportunities will foster a community of practice (CoP) comprised of administrators, faculty, and staff who share a common concern and commitment to FMCSs (Sherbert et al., 2017). Participants will learn who FMCSs are, their successes and challenges, and why the college community should care about this population of learners.

Recommendation 2: Offer a Military-Connected Student Orientation

Borsari et al. (2017), DeCoster (2018), and Williams-Klotz and Gansemer-Topf (2018) recommend an orientation that targets the needs of FMCSs. These students are

often confused by the college environment and may benefit from a structured orientation that provides information about college resources and services (Borsari et al., 2017). Sessions should include ways for students to connect their military training experiences with academic skills (Sikes et al., 2020), planned interactions with faculty and staff representing educational and support services, and information on military-connected organizations.

Each military-connected student orientation will consist of a virtual and face-to-face module required before enrolling in an associate degree program. The virtual module will be offered first because it provides FMCSs with foundational knowledge about the college and services to support their academic success. The face-to-face module will follow the completion of the virtual module. Introducing FMCSs to faculty and staff and collaborating with partner organizations will improve their college experience, lessen the risk of attrition, and positively influence the graduation rate (DeCoster, 2018; Williams-Klotz & Gansemer-Topf, 2018). The face-to-face module of the orientation will facilitate conversations with college community members so FMCSs can feel connected to the college community. Providing military-connected student orientation sessions before the start of each semester will prepare students for academic rigor, improve their community college experience, and may increase the graduation rate.

Recommendation 3: Implement a Research Committee

Research is crucial to understanding the factors that impact FMCSs' academic success and will prepare educators with the most effective teaching strategies (Mercer et al., 2014). Research initiatives related to FMCS success should include education

counseling, educational leadership, student affairs, educational leadership, and adult

education in the military. Sustaining the K-State initiative required an active

interdepartmental research committee (Sherbert et al., 2017). A similar committee at

CCNE would allow educators to collaborate on projects, research topics and questions

related to FMCSs and plan for presentations to a broader audience. A collaborative team

approach will contribute to the literature on improving FMCS success and provide

recommendations for future studies.

Recommendation 4: Recruit Older Military-Connected Students

Current research suggests that military-connected students tend to be older than

traditional-aged students (Borsari et al., 2017; Johnson & Appel, 2020) and are often

referred to as members of the nontraditional student population (Dillard & Yu, 2018;

Morrill & Somers, 2020; Zhang, 2018). The mean age for FMCSs in this study was 24.83

years old. Only 17.7% of study participants were 25 years or older compared to 34% of

the total CCNE student population. Furthermore, college enrollment has significantly

decreased since the onset of the COVID-19 pandemic, indicating an urgent need to

recruit older FMCSs to enroll at CCNE.

Effective recruitment strategies must consider what older FMCSs want from their

educational experience at CCNE. Johnson and Appel (2020) recommended that college

leaders know the degree programs that interest FMCSs, such as business, health-related

professions, law enforcement, fire-fighting, computer science, engineering, and

education. CCNE offers associate degree programs in all of these high-demand fields and

should advertise the availability of these popular majors to older FMCSs. Temple

University actively recruits FMCSs through relationships with external organizations that serve this population (Elfman, 2017). CCNE can collaborate with their community partners on strategies to assist FMCSs transitioning into higher education. CCNE's relationship with local veteran community centers, the local VA medical center, and veterans services offices at nearby colleges can support the recruitment effort for older FMCSs and improve the diversity of this population.

Required Resources and Support

CCNE has the organizational infrastructure to implement all the recommendations in this policy paper and will not require additional staff. CCNE has an extensive professional development program overseen by the director of organizational development, who provides customized workshops. The student success center manages the virtual new student orientation, which can be modified for FMCSs with input from students and staff from the VSO. Admissions services have staff dedicated to providing tours on all college campuses and can coordinate the face-to-face military-connected student orientation with VSO staff. CCNE works collaboratively with a state university on projects that engage in human subject research as described by the Federal Policy for the Protection of Research Subjects and can support a committee dedicated to research related to FMCSs. The VSO maintains relationships with various external partner organizations to help recruit older FMCSs. Because they have access to federal education funding, increasing FMCS enrollment can increase the monies available to support this policy paper's recommendations.

Potential Barriers and Solutions

Stakeholder buy-in is crucial to minimize potential barriers to implementing this policy paper's recommendations. Effective communication will encourage stakeholder cooperation and engagement in new organizational change (Garcés et al., 2019). Communication with administration, faculty, and staff will help overcome resistance to change (Zimmer & Keiper, 2021). Support from CCNE administrative leadership is the first step in policy implementation. This policy's evidence-based recommendations will inform the leadership team about the problem and how the new policy will lead to social change.

Faculty may be tentative because one of the goals of professional development is to introduce new teaching strategies, and administration and information technology staff may have concerns about the need for additional resources (Okai-Ugbaje et al., 2020). Open communication with faculty and staff will inform them about the need for change, which dovetails with the college's mission to meet the educational needs of a diverse student population. Emphasizing the importance of improving student achievement can encourage stakeholders to take ownership of a new initiative (Zimmer & Keiper, 2021). Buy-in from external community partners is essential for the recommended recruitment effort and relies on clear communication of the new policy's goal to improve FMCS academic success. The communication plan will demonstrate that little to no resources are required to implement the policy recommendations to help ease fears about additional costs. This policy's recommendations need support from the administration to delegate

recommendation requirements to the director of organizational development, student success center, admissions, VSO, and dean of research.

Implementation and Timetable

This new policy's recommendation will follow CCNE's guidance outlined in the Development and Maintenance of College Policies. The VSO will be responsible for overseeing the initiation of the new policy, monitoring its progress through the approval process, and ensuring compliance with all college policies. The VSO will periodically review the policy according to college guidelines and make recommendations. Input from college community members, the institutional accessibility committee, student advisory committee, and faculty senate will inform the policy's recommendations. The VSO will forward the proposed policy to the office of the president for delivery to the office of the general counsel and subsequently to the president's council for review. The president's council will provide recommendations to the president, who is responsible for approving this policy. Once approved, this policy will take effect the following academic year.

Roles and Responsibilities

Once this policy takes effect, staff will need to collaborate to meet the requirements of the recommendations. The director of organizational change will oversee the new professional development program with suggestions for topics from the VSO staff and community partners who support FMCSs. The dean of library services will allocate physical space for professional development resources related to FMCSs at all four campuses. The library website content manager will make information about hardcopy and online resources available on the college website. The student success

center staff will work with the information technology team to modify the virtual new student orientation to create a military-connected student module. The admissions and VSO staff will coordinate the military-connected student orientation face-to-face module. The dean of research will oversee the interdepartmental research committee with the nursing and allied health leadership team. The VSO staff will be responsible for working with CCNE's community partner organizations that support military-connected students to coordinate the FMCS recruitment effort. This policy's evaluation plan will assess the effectiveness of these recommendations.

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Project Evaluation Plan

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The primary goal of this evidence-based policy paper is to provide a safe and inclusive learning environment that will improve FCMS's academic success at CCNE. The effectiveness of this policy paper's recommendations requires an evaluation plan that will measure outcomes over a minimum of 6 years after the policy's implementation. An outcome-based plan, including online surveys, questionnaires, and posttests, can effectively demonstrate educator competence and measure student learning and performance (Sathyanarayanan et al., 2018; Tan et al., 2018). This policy paper's evaluation plan is outcome-based and requires formative and summative methods to determine the effectiveness of the recommendations.

This policy's recommendation for professional development should occur during employee orientation sessions for all new college employees, between the fall and spring semesters, and during the summer months when student attendance is low to encourage participation. All college personnel will participate in at least one hour-long professional

development module per year to comply with the policy recommendation. Each participant will complete an electronic formative assessment to confirm attendance and evaluate learning. The electronic form will route to the director of organizational development's office when completed.

The recommendation for a mandatory military-connected student orientation will require students to attend a virtual and face-to-face module before registering for classes. After completing both modules, students will receive an electronic formative assessment to confirm attendance and evaluate the participant's learning. The electronic form will route to the student success center office when completed. Students cannot register for classes until they complete the formative assessment. The director of organizational development and student success center staff will forward the assessment data and recommendations to the VSO at the end of each semester.

Evaluation of the interdepartmental research committee will be formative and require an internal self-study, external peer review, and comprehensive review. All faculty researchers will participate in and submit a yearly self-study reporting on completed and ongoing projects, resources needed, and the status of IRB application submissions. The state university and CCNE have members on a joint IRB committee. University committee members will provide an external peer review of CCNE's research committee program. The comprehensive review will incorporate feedback from the internal self-study and external peer review to provide recommendations for improvement to the dean of research. All comprehensive review recommendations will be forwarded to the VSO.

The goal of this policy paper is to improve FMCS's academic success. A summative assessment will use annual FMCS graduation rates to determine the overall effectiveness of the policy recommendations. Because many FMCSs enroll part-time due to family and work responsibilities (Jenner, 2019), the graduation rate data should include full and part-time students. The graduation rate will consist of students who graduate 6 years after initial enrollment for a more realistic FMCS graduation rate (Juszkiewicz, 2017). The ORIA will submit FMCS graduation rate data to the VSO coordinator 2 years after implementing this policy because full-time students can complete an associate degree within 2 years and continue annually for 4 years to determine if FMCS's success has improved. The OIRA will submit FMCS enrollment to the VSO coordinator each semester after the recruitment effort begins to evaluate whether the recruitment effort contributed to increased FMCS enrollment.

The VSO coordinator, director of organizational development, student success center staff, the dean of research, the president's council, and the CCNE president are the key stakeholders responsible for evaluating this policy's effectiveness. The VSO coordinator will submit recommendations from the director of organizational development and student success center and data for the FMCS recruitment effort at the end of each semester, with the recommendations from the dean of research submitted annually to the president's council for review and referral to the president.

Project Implications

Implications for Local Stakeholders

This policy paper provides recommendations to improve FMCS academic success, leading to sustainable social change at CCNE. CCNE's mission is to offer the diverse student population the opportunity to acquire the knowledge and skills needed for intellectual, professional, and personal growth to participate in the region's workforce and engage in lifelong learning. Creating a safe and inclusive learning environment can improve FMCS's success and result in little to no taxpayer cost because CCNE has the infrastructure to support it. Also, FMCSs receive funding to pay for their college degree, which could offset any additional costs. Increasing the FMCS graduation rate will prepare men and women for employment in the local economy and civic engagement in their local communities. Local employers and community organizations are stakeholders who partner with CCNE and will benefit from a labor pool of skilled graduates to fill high-demand job vacancies and participate.

Professional development will improve faculty and staff understanding of the FMCS population and their learning needs. Teaching strategies, counseling techniques, and services that focus on FMCS success will help college personnel improve their work performance. Promoting research can improve faculty engagement and provide meaningful contributions to the literature. Increasing enrollment will allow CCNE to offer learning opportunities to more FMCSs in the local community who bring education funding monies that could support programs for this population of students.

Similar studies could identify other groups within the student population who would benefit from an institution policy focused on their unique needs. CCNE's mission recognizes the diversity of the local community and is committed to promoting the success of all students. Future research studies can use data collected yearly by the OIRA to determine the need for policy recommendations based on ethnicity, cultural differences, age, or academic program, which could continue to promote social change at CCNE and within the local community.

Implications in a Larger Context

The initiatives at Kansas State University (Sherbert et al., 2017), the Green Zone Initiative (Kastle et al., 2019), and the Military-Connected Campus at Fanshawe College (Fanshawe College, n.d.) show that concerns about FMCS academic success are not a local problem and lay the foundation for the recommendations in this policy paper. This policy paper recommends creating a safe and inclusive learning environment that may be transferable to other community colleges with FMCSs. The diversity of the student population could vary depending on the local population surrounding a community college. Therefore, future research at these schools could identify groups unique to the institution who may benefit from a policy paper focusing on their learning needs. School leaders that adopt this policy paper's recommendations can help to promote social change within higher education.

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Summary

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A policy paper is the most effective way to create the sustainable change required to improve FMC's academic success at CCNE. This section provides a detailed review of

how current research provided the foundation for this policy paper's recommendations. The literature review supports an evidence-based justification for choosing a policy paper for this project. This policy paper aligns with CCNE's mission of preparing local community members for work and engagement in the local community. This policy's recommendations require little to no additional resources. At the same time, CCNE may experience a financial benefit from increased FMCS enrollment because these students have access to educational funding based on their military service. This policy paper suggests a college-wide approach to creating a safe and inclusive learning environment that supports FMCS's success. Promoting communication will inform this policy's recommendations and encourage buy-in from internal and external stakeholders, which is crucial for FMCS's success.

Section 4 outlines how the project's strengths and limitations will benefit CCNE stakeholders and offers recommendations for alternative approaches and reflections on personal learning, professional growth, the importance of this project, and suggestions for future research. Finally, implications for social change at CCNE and other higher education institutions are presented.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

CCNE leadership and staff were instrumental partners in completing this research study on FMCSs' predictors for academic success. In this study, the predictors for nontraditional students were not found to be significant, suggesting that FMCSs are a unique group that may require services tailored to their needs. These results led to this policy paper's recommendations to create a safe and inclusive learning environment for FMCSs and increase the number of FMCSs greater than 25 years old. Implementing a new policy based on this paper's recommendations will inform stakeholders and address a gap in practice that could improve FMCSs academic success. With administrative support, CCNE has the resources to enforce this policy paper's recommendations.

Project Strengths

A local problem and this study's results informed the need to develop this policy paper's recommendations based on research and best practices documented in current literature. This study used data on recent FMCSs and indicates a need to address an existing problem. The policy's recommendations focus on college-wide awareness and participation to achieve the overarching goal of improving FMCS's graduation rate at CCNE.

This policy paper's recommendations address a gap in practice at CCNE. The FMCS graduation rate is low, which indicates a need to look at predictors that could inform strategies to improve their academic success. Current research provided the foundation for this policy's recommendations to create a safe, inclusive learning

environment and educational opportunities for older FMCSs through recruitment. The recommendations are grounded in Tinto's (1993) theory suggesting that students who feel integrated into the college community are more successful. Therefore, creating a safe and inclusive learning environment may decrease the number of FMCSs who transfer to other institutions and entice older learners to enroll in one of CCNE's associate degree programs.

For FMCSs to succeed, they need a college-wide approach that promotes cultural awareness and engagement (Kruse et al., 2018; Sherbert et al., 2017). This evidence-based policy paper will inform CCNE stakeholders of the need for organizational change to create a safe and inclusive learning environment that supports FMCS's success. The dean of research facilitated approval for the data collection, and the OIRA was timely in delivering the requested data. The support of the CCNE leadership team members shows their interest, which may influence other stakeholders on the need to implement a new policy based on this paper's recommendations.

Project Limitations

FMCSs enroll in many community colleges throughout the United States (Molina & Morse, 2015). Because this study suggests that FMCSs are a unique group, these students may benefit from this policy paper's recommendations at any community college location. This policy paper's recommendations were developed for FMCSs at CCNE, where services are in place to support their academic success. Therefore, this policy's recommendations may not be transferrable to schools that do not have services in place for FMCSs.

Recommendations for Alternative Approaches

A mixed-methods study could have provided stakeholder input for this policy paper's recommendations by including interviews with faculty, staff, students, and community partners. Their diverse perspectives would have added value to the policy's recommendations and encouraged buy-in from all stakeholders. However, the dean of research had reservations about student, faculty, and staff privacy issues and potential harm to participants; therefore, a mixed-methods study was not practical.

Alternatively, this project could have focused only on professional development training as a deliverable. The policy paper could have provided a detailed training program for CCNE college personnel that would raise awareness about the needs of FMCSs and encourage participation in helping them succeed. Current research favors a college-wide approach that includes professional development, a military-connected student orientation, and faculty participation in research projects to support FMCS's success (DeCoster, 2018; Mercer et al., 2014; Sherbert et al., 2017; Williams-Klotz & Gansemer-Topf, 2018). Therefore, this policy paper proposes professional development as one aspect of a comprehensive initiative that includes a military-connected student orientation, an interdepartmental research committee, and a recruitment effort to improve FMCS outcomes and bring about sustainable social change CCNE.

Scholarship, Project Development and Evaluation, and Leadership and Change

Scholarship

I chose Walden University's Doctor of Education to advance my career in higher education as a scholar-practitioner. During my coursework, I learned to use research-

based evidence to justify my arguments and strategies for project-based learning. Interacting with the instructors and my peers encouraged me to reflect on my work as an educator and grow professionally. As a student researcher, I learned how to identify problems in higher education at the local and national levels and formulate research questions focused on the purpose of this study. My experience as a Walden doctoral student has taught me how to be a researcher who can use my study's results to solve a local problem by addressing a gap in practice. This educational journey has reinforced my commitment to lifelong learning and adult education. Most importantly, I have become a better practitioner who can help my students succeed.

Project Development and Evaluation

Throughout most of my coursework at Walden, I used peer-reviewed literature related to the topic I chose for my project study. By the time I reached the prospectus stage, I had digested many journal articles about the population I wanted to study. As I learned more about my topic, my perspective focused on what I wanted to study. A local problem at CCNE was the impetus for my project study. The results of my research guided me toward a policy paper that lays the foundation for social change at the local level.

A literature review showed that sustainable positive change requires an organizational evidence-based policy to ensure stakeholder buy-in and desired outcomes (Durazzi, 2019; Ellegood et al., 2019). The literature showed that FMCS academic success is not a local problem. Mercer et al. (2014), Fanshawe College (n.d.), Kastle et al. (2019), and Sherbert et al. (2017) offer examples of initiatives that support FMCSs at

various institutions of higher education. Based on this review and the results of my study, I decided to develop a policy paper with evidence-based recommendations for change at CCNE.

If CCNE implements a new organizational policy based on this paper's recommendations, I expect it to improve FMCSs' success, evident in an increased associate degree completion rate. Successful FMCS outcomes will require college-wide participation to create a safe, inclusive learning environment for this population of learners. Although it will take 6 years after policy implementation to determine the overall effectiveness, periodic evaluations recommended annually and after each semester will allow the administration to monitor FMCSs' progress.

Leadership and Change

All stakeholders in an organization can be leaders of change. A leader recognizes a problem and takes the initiative to communicate with other stakeholders to find a solution. Although senior leadership in higher education must support a new initiative, they rely on others who have a vested interest in the change (Frantz et al., 2020). Organizational change at CCNE requires leadership, communication, and evidence-based college policy. This policy paper recommends a college-wide approach to improve FCMS success and promote social change. Effectively implementing this policy relies on communication amongst all stakeholders to get administrative support for the change and stakeholder input for the recommendations. As a scholar-practitioner, I provided a policy recommendation paper based on current research that will address a local problem that leads to sustainable social change.

Reflection on Importance of the Work

Although CCNE provides services dedicated to FMCS success, the graduation rate for this student population is low. This study led to policy paper recommendations for a college-wide approach to creating a safe and inclusive learning environment that will support FMCS's success and promote social change. Tinto's (1993) theory suggests that students who feel integrated into the college community have a better experience and are more successful. Administrators, faculty, and staff must understand the diversity, culture, and education needs of FMCSs to prepare themselves to develop learning strategies that will help this population succeed. When implemented, this policy's recommendations can improve the graduation rate for FMCSs and prepare them for employment after graduation. Local businesses can then benefit from a larger pool of qualified applicants to fill job vacancies. Graduates are prepared for professional success in the economy and equipped to participate in their local communities (Belfield & Bailey, 2017).

Implications, Applications, and Directions for Future Research

Implications

This policy paper recommends a college-wide approach to raise awareness about FMCS's needs to help this population succeed. Implementing this policy at CCNE can promote social change by increasing the number of FMCSs who can fill job vacancies in the local economy. Local businesses will benefit from a more educated labor pool to fill job vacancies. Increasing enrollment will provide learning opportunities for more

FMCSs. Also, FMCSs receive government funding to finance their education, and improving their graduation rate may lead to a positive taxpayer return on investment.

Applications

Other groups at CCNE may be underperforming and benefit from a similar study using data collected by the OIRA. The study results can lead to policy recommendations tailored to the individual group's learning needs. This policy paper may be transferable to other community colleges with services dedicated to FMCSs. These schools can use the recommendations as a template to create a safe and inclusive learning environment to promote their FMCS academic success.

Directions for Future Research

Once implemented, it will take 6 years to complete the final evaluation to determine this policy paper's effectiveness. Communication with authors S. Appel and G. Johnson on May 20, 2021, suggests future research could focus on predictors for success exclusive to FMCSs, such as military branch, time in service, and whether they are full-time, part-time, or separated from the military. If future studies identify predictors for success, this policy paper can be modified to include new recommendations.

<div align="center">

Conclusion

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The low graduation rate of FMCSs at CCNE was the impetus for this project study. My coursework and doctoral committee at Walden University prepared me to conduct a research study that led to this evidence-based policy paper's recommendations for creating a safe and inclusive learning environment to support FMCS's success. Because the data showed that most FMCSs were less than 25 years old, this policy paper

recommends a recruitment effort to increase enrollment. I will share this study's results and policy paper recommendations to improve FMCSs' success with CCNE stakeholders and administration. My educational experiences at Walden University have taught me how to conduct research and use study results to promote student learning and sustainable social change. I understand how to evaluate academic literature and research methodologies. This project study may transfer to other community colleges with FMCSs and contribute to the scholarly literature.

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transitions-back-civilian-life-and-va-s-response

Appendix: The Project
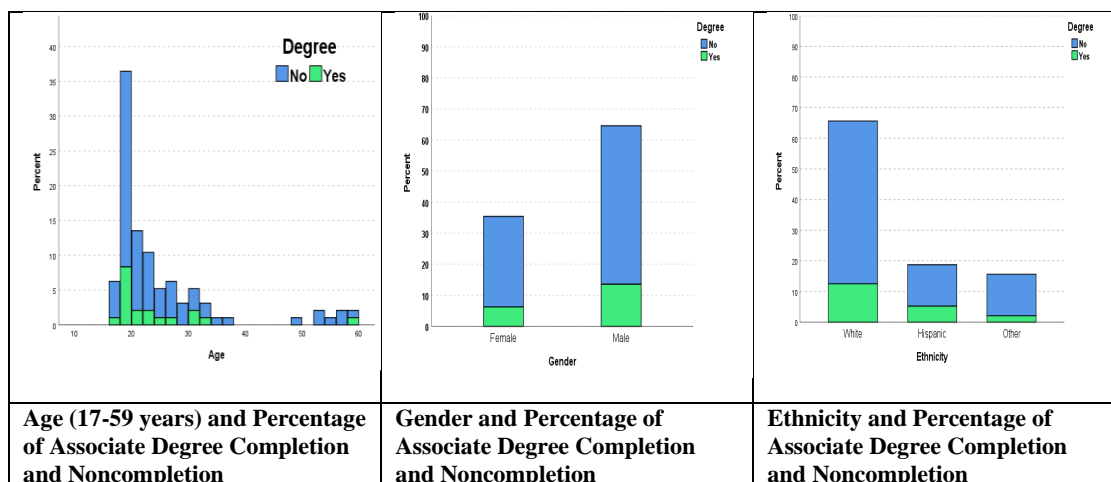
CCNE Military-Connected Student Initiative

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Executive Summary

Funded military-connected students (FMCSs) are often considered part of the
nontraditional student population (Morrill & Somers, 2020). The learners have access to
taxpayer-funded programs to finance their education. Although CCNE provides services
and resources to support these learners, the first-time, full-time FMCS graduation rate is
7%. This study's research led to this policy paper's development which showed that
nontraditional factors were not significant for this population, suggesting they are a
unique group requiring different support services. This policy paper offers
recommendations based on current research that targets FMCS academic success.

Age (17-59 years) and Percentage of Associate Degree Completion and Noncompletion	**Gender and Percentage of Associate Degree Completion and Noncompletion**	**Ethnicity and Percentage of Associate Degree Completion and Noncompletion**

The initiative at Kansas State University (Sherbert et al., 2017), the Green Zone
Initiative (Kastle et al., 2019), and the Military-Connected Campus at Fanshawe College
(Fanshawe, n.d.) show that concerns about FMCS academic success are not a local
problem and lay the foundation for the recommendations in this policy paper. Sherbert et
al. (2017) suggested a successful initiative requires a college-wide approach with an

"ethos of care and concern for military-connected students"(p. 202). This policy paper is based on this approach and recommends the following:

Recommendation 1: Offer Professional Development

Offer all faculty and staff evidence-based professional development and resources that promote college-wide awareness about military culture, effective advising, counseling techniques, and teaching strategies to improve academic success.

Recommendation 2: Offer a Military-Connected Student Orientation

Offer a mandatory orientation before each semester to educate FMCSs about programs and resources that promote their academic success.

Recommendation 3: Implement a Research Committee

Implement an interdepartmental research committee to promote awareness and collaboration on research projects related to FMCSs' academic success that inform the college community and contribute to the literature.

Recommendation 4: Recruit Older Military-Connected Students

Recruit FMCSs over 25 years old to improve the diversity of the population.

Final Thoughts

This policy paper used research-based evidence to develop recommendations for a safe and inclusive learning environment to improve the academic success of FMCSs and will be a positive return on taxpayer investment. This initiative requires low financial investment and is sustainable with college-wide involvement and existing resources.

Introduction

Current research studies show the need to provide dedicated services that support

FMCS success. Kruse et al. (2018) made research-based recommendations for a cultural

competency plan to address the needs of diverse college campuses, including the unique

group of FMCSs. Sherbert et al. (2017) emphasized the need for a community of practice

to address the special educational needs of FMCSs. Kastle et al. (2019), Kruse et al.

(2018), Mercer et al. (2014), and Sherbert et al. (2017) recommended a college-wide

approach to improve the understanding of FMCSs through professional development, a

meaningful exchange of ideas, and practices grounded in research. The federal

government provides taxpayer-funded education benefits for FMCSs to ease their

financial burden, but they require services dedicated to their success. Although CCNE

offers various support services available to this population, their graduation rate is low.

This study suggests that FMCSs are a unique group that may require services based on

their differences. This policy paper provides recommendations to create a safe and

inclusive learning environment to improve FMCS's academic success.

The Problem

The problem that prompted this policy paper recommendation is the low

graduation rate of FMCSs at CCNE. The college's Office of Institutional Research and

Assessment reported a 7% graduation rate for first-time, full-time students enrolled in an

associate degree program during the 2010-2011 academic year. The reported statistics do

not include part-time enrollments.

The Purpose

The purpose of this study was to determine if nontraditional factors were predictors for FMCSs. According to the interim director of the college's OIRA, only 10% of FMCSs enrolled full-time, with 90% part-time. Therefore, this research study included full and part-time enrollments to determine whether nontraditional factors were predictors of success for all FMCSs at CCNE enrolled in September 2013. The results showed these factors were not predictors for FMCSs, indicating they are a unique group that may require services based on their differences. This policy paper's recommendations focus on creating a safe and inclusive learning environment to improve FMCS success and include professional development, a military-connected student orientation, a research committee, and recruitment of older FMCSs.

Methodology

Research Questions

The following research questions guided this study:

RQ1: What is the effect of age on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

RQ2: What is the effect of gender on completing a 2-year associate degree at CCNE within 6 years for FMCSs?

RQ3: What is the effect of ethnicity on completing a 2-year associate degree at CCNE within 6 years for FMCSs.

Study Design

This study used a correlational quantitative research design to determine if nontraditional factors predict academic success for FMCSs at CCNE. The analysis used logistic regression with SPSS (Version 27) to predict the effect of age, gender, and ethnicity on the associate degree completion rate for FMCSs. This study used deidentified secondary data on the population of 550 men and women who are defined as veterans, reservists, and active-duty personnel. Those who transferred from CCNE to another educational institution between the September 2013 fall semester and the May 2019 spring semester before graduating with an associate degree were considered incomplete because the focus of this study is on completion at CCNE. All participants received benefits from military funding programs and enrolled full or part-time in an associate degree program at CCNE in September 2013 and graduated by May 2019. This timeframe allowed FMCSs to complete their degree within 6 years and eliminated the 2020 academic year because of the unusual circumstances surrounding the COVID-19 pandemic.

Evidence-Informed Literature

FMCSs meet at least one of the criteria for the NCES's (2002) definition for nontraditional students: delayed college enrollment, part-time enrollment, financial independence, full-time employment while enrolled, had dependents that were not a spouse, was a single parent, did not receive a conventional high school diploma. Although these learners share nontraditional characteristics, they are often considered a

subset of the college population because of their unique service-related experiences (Johnson & Appel, 2020).

The majority of service members in all five branches of the U.S. military consist of junior enlisted service members, many of whom do not have a college degree (Zogas, 2017). Many will transition into higher education with hopes of earning a college degree that will help them secure employment. Military funding programs provide federal education funding for those who served in the U.S. military to help prepare them for civilian jobs (Stevens, 2018). Federal funding for FMCSs is a significant investment in the U.S. economy and includes the GI Bill (Stevens, 2018), the Chapter 31 Veteran Readiness and Employment program (VR&E) (U.S Department of Veteran Affairs, 2021), and the Chapter 1606 Montgomery GI Bill Selected Reserve (MGIB-SR) program (U.S. Department of Veterans Affairs, 2022).

Earning an associate degree at a community college is an appealing option for FMCSs. These institutions often provide services and staff dedicated to their academic success. Community colleges are convenient, cost-effective, support part-time learners and provide access to higher-paying jobs after graduation (Belfield & Bailey, 2017; Remenick, 2019; Williams-Klotz & Gansemer-Topf, 2018). Although CCNE offers services dedicated to FMCSs, their graduation rate is low. Previous research on FMCSs has frequently used nontraditional factors such as age, gender, and ethnicity to predict success (Morrill & Somers, 2020). Therefore, this study used age, gender, and ethnicity to determine if these predictors are the same for FMCSs. The results of this study led to the development of this policy recommendation paper.

Analysis of Findings

The population size was 96 FMCSs who enrolled full or part-time in September

2013. This study included all FMCSs, which met the minimum sample size of 76 as

defined by Cohen (1992) for multiple regression using a power of .80 for an alpha of .05,

and a medium population effect size with three variables (factors). Only 19 FMCSs

completed an associate degree, and 77 did not, resulting in a 19.8% graduation rate. The

mean age of the population is 24.64, with a standard deviation of 10.25. Figure 1 shows a

histogram of the age distribution (17 to 59 years old) and the percentage of associate

degree completion and noncompletion. FMCSs who completed an associate degree had a

mean age of 23.84, with a standard deviation of 9.83. FMCSs who did not complete an

associate degree had a mean age of 24.83 years, with a standard deviation of 10.40.

Figure 2 shows the percentage of FMCSs who completed and did not complete an

associate degree by gender. Figure 3 shows the percentage of FMSs who completed and

did not complete an associate degree by ethnic group.

Figure 1

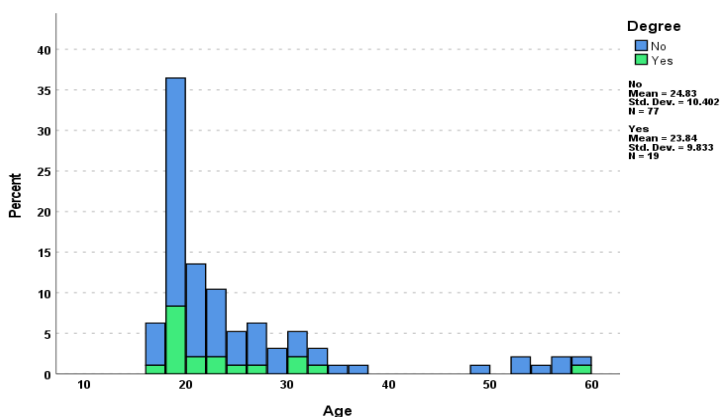*Percentage of Associate Degree Completion and Noncompletion by Age*

Figure 2

Percentage of Associate Degree Completion and Noncompletion by Gender
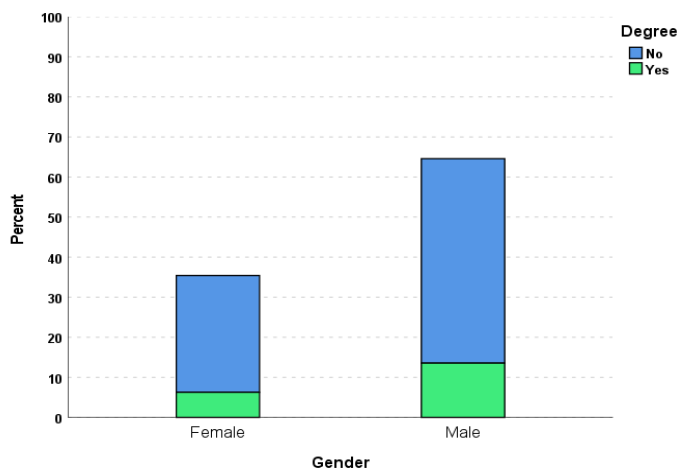
Figure 3

Percentage of Associate Degree Completion and Noncompletion by Ethnicity
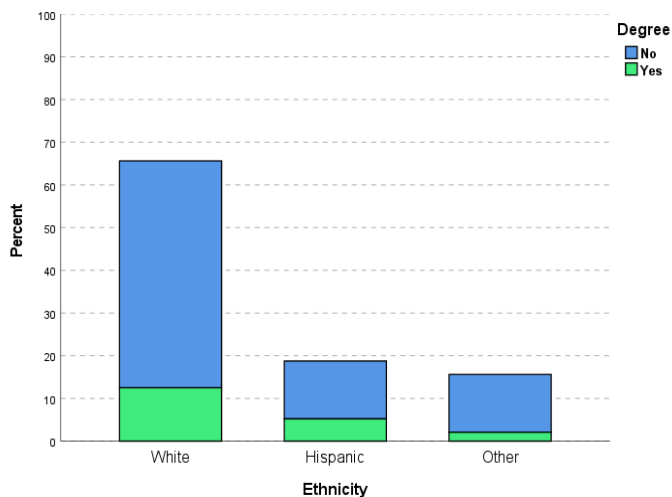
Binomial logistic regression was performed to ascertain the effects of the predictors, age, gender, and ethnicity, on participants' likelihood of completing an associate degree. The *p* value for each predictor was greater than .05, meaning none of the predictors were significant. Therefore, the null hypotheses were accepted where age,

gender, and ethnicity are not predictor variables for FMCSs completing an associate

degree within 6 years (as shown in Table 1).

Table 1

Logistic Regression Predicting Likelihood of Completing an Associate Degree based on Age, Gender, and Ethnicity

							95% CI for *OR*	
Variable	*B*	*SE*	Wald	*df*	*p*	Exp(B)	Lower	Upper
Age	.00	.03	.02	1	.89	.99	.94	1.05
Gender	-.14	.56	.06	1	.80	.87	.29	2.61
Hispanic	-.46	.63	.55	1	.46	.63	.19	2.14
Other	.38	.86	.19	1	.66	1.50	.27	7.92
Age x ln (Age)	.04	.15	.06	1	.81	1.04		

Note. CI = Confidence interval.

Best Practices

The predictors for nontraditional students were not found to be significant in this

study, suggesting that FMCSs are a unique group requiring services based on their

differences. This study's results led to this policy paper's recommendations to create a

safe, inclusive learning environment to improve FMCS success. A college-wide approach

through a community of practice will promote cultural awareness and build commitment

to support FMCSs as a unique group (Kruse et al., 2018; Sherbert et al., 2017). Current

research provides the foundation for this policy paper's recommendations. The

overarching goal of this policy paper is to increase the FMCS associate degree

completion rate and prepare graduates for civilian employment in the local economy.

Project Recommendations

1. Offer all faculty and staff evidence-based professional development and

   resources that promote college-wide awareness about military culture,

effective advising, counseling techniques, and teaching strategies to improve academic success.

2. Offer a military-connected student orientation before each semester to educate FMCSs about programs and resources that promote their academic success.

3. Implement an interdepartmental research committee to promote awareness and collaboration on research projects related to FMCs' academic success that inform the college community and contribute to the literature.

4. Recruit FMCSs over 25 years old to improve the diversity of the population.

Recommendation 1: Offer Professional Development

The Green Zone Initiative (Kastle et al., 2019), developed at Fort Hays State University and Kansas State Universities K-State initiative (Mercer et al., 2014), can be used as templates to build a comprehensive professional development program at CCNE that will build awareness and commitment to improving the success of FMCSs. Kastle et al. (2019) and Mercer et al. (2014) recommend a college-wide approach to professional development and suggest providing digital resources, hardcopy references, and virtual and face-to-face learning experiences. Both initiatives resulted from a collaboration of academic departments, the college veteran services office, counselors, and local veteran services organizations external to the college.

The college-wide approach will foster a community of practice (CoP) comprised of administrators, faculty, and staff who share a common concern and commitment to FMCSs (Sherbert et al., 2017). Ongoing participation in professional development, activities, and research projects will increase the CoP's expertise in FMCSs, improving

teaching strategies, academic support, and learning outcomes. The CCNE website is a

valuable tool for outreach to the college community about professional development. The

K-State Initiative CoP (Mercer et al., 2014) found its college website to be a valuable tool

to educate the college community about FMCSs and advertise resources, professional

development opportunities, and other relevant information related to this population.

Sherbert (2017) highlighted The K-State Initiative's website as a best practice for

supporting faculty's commitment to supporting FMCSs in the classroom and increasing

the availability of resources related to this population to the college community.

 A section of the college library dedicated to hardcopy resources will make

resources targeting FMCSs available to faculty, staff, and students (Mercer et al., 2014).

Videos, movies, and documentaries can inspire the college community to embrace the

FMCS population and encourage participation in activities that support their success. K-

State's College of Education created a YouTube video called A Walk in My Shoes:

Military Life to help educators, staff, and students understand the unique experiences of

FMCSs and families (K-State College of Education, 2013). This video applies to FMCSs

on any college campus and can be used as a template or in its original form with

permission. The movie, Taking Chance, starring Kevin Bacon, is an emotional account of

how the military honors those who have died during their service (Katz, 2009). Finally,

Flat Daddy is a documentary following four families who use life-size surrogate cut-outs

of their loved ones serving in the U.S. military to help them cope with their absence and

the impact of war (Garber & Nagler, 2011). Digital and hardcopy resources will help the

college community understand military culture and the sacrifices made by servicemen and women and their families.

Staff from the VSO at CCNE, students, and military-connected partner organizations in the local community are stakeholders who can provide insight and support for the initiative and suggest topics for professional development. Virtual and face-to-face research-based workshops on military culture, deployment, teaching strategies, and building resilience in higher education will accommodate faculty and staff learning styles and schedules. The Green Initiative: Helping Military and Veteran Students (Turner, Kastle, and Broadway, 2021) provides an excellent example to reference for similar training at CCNE. Dillard and Yu (2018) recommend professional development that educates and trains faculty and staff on real-life situations. They encourage participants to think critically and apply what they learned using scenario-based exercises and interacting with FMCS volunteers. These professional development training opportunities will help participants understand who FMCSs are, their successes and challenges, and why the college community should care about this population of learners.

Recommendation 2: Offer a Military-Connected Student Orientation

Borsari et al. (2017), DeCoster (2018), and Williams-Klotz & Gansemer-Topf (2018) recommend an orientation that targets the needs of FMCSs. Sessions should include ways for students to connect their military training experiences with academic skills, planned interactions with faculty and staff representing academic and support services, and information on military-connected organizations. Providing military-

connected student orientation sessions before the start of each semester will prepare students for academic rigor, improve their community college experience, and help increase the graduation rate.

Key members of the CoP, FMCS volunteers, staff from the VSO, stakeholders from partner organizations, and other experts within the college community can provide input for the orientation format, which includes virtual and face-to-face components. DeCoster (2018) and Williams-Klotz & Gansemer-Topf (2018) suggested offering information on college services and transferring military experience for college credit. Borsari et al. (2017) emphasized that FMCSs are often confused by the college environment and may benefit from a structured orientation that provides information about college resources and services. Sikes et al. (2020) highlighted an initiative to address FMCS concerns about receiving college credit for their military experiences at Texas Tech University Health Sciences Center. Students demonstrated competencies learned through their military service, thereby decreasing the time to complete their academic program.

Each recommended military-connected student orientation will consist of a virtual and face-to-face module required before enrolling in an associate degree program. CCNE's learning management system will provide the platform for the virtual orientation sessions. The module will be a self-paced course on using the college website to locate and learn about academic programs, library services, admissions, disability services, FMCS resources, applying for education funding, and earning college credit for military experience. The virtual module will be offered first because it provides FMCSs with

foundational knowledge about the college and services to support their academic success. The face-to-face module will follow the completion of the virtual module.

Williams-Klotz and Gansemer-Topf (2018) suggest introducing FMCSs to faculty and staff and collaborating with partner organizations will improve their college experience and reduce attrition. Furthermore, fostering positive relationships with faculty, staff, and peers can positively influence FMCSs' graduation rate (DeCoster, 2018). The face-to-face module of the orientation will facilitate conversations with members of the CoP. Educators and staff can answer questions about teaching strategies, reasonable accommodations, and earning college credit for military experience. Representatives from internal and external partner organizations can share what their organizations have to offer to support FMCS's success. Members of the college's veteran student organization will meet with new students to discuss their services and how they provide peer support. Completing the virtual and face-to-face orientation modules will prepare FMCSs by educating them about the available resources and introducing them to the faculty, staff, and students who can provide the support they may need to succeed at CCNE.

Recommendation 3: Implement a Research Committee

Research is crucial to understanding the factors that impact FMCSs' academic success and how to prepare educators with the most effective teaching strategies (Mercer et al., 2014). Research initiatives related to FMCS success should include education counseling, educational leadership, student affairs, educational leadership, and adult education in the military. Sustaining the K-State initiative required an active

interdepartmental research committee that met routinely (Sherbert et al., 2017). A similar

committee at CCNE would allow educators to collaborate on projects, research topics and

questions related to FMCSs and plan for presentations to a broader audience. A

collaborative team approach will contribute to the literature on improving FMCS success

and provide recommendations for future studies.

Recommendation 4: Recruit Older Military-Connected Students

Borsari et al. (2017) and Johnson and Appel (2020) emphasize that FMCSs tend

to be older than traditional-aged students and are often referred to as members of the

nontraditional student population (Dillard & Yu, 2018, Morrill & Somers, 2020 & Zhang,

2018). The mean age for FMCSs in this study is 24.83 years old. Only 17.7% of study

participants were older than 25 years old, compared to 34% of the total student

population. Furthermore, college enrollment has significantly decreased since the onset of

the COVID-19 pandemic, indicating a need to recruit older FMCSs to enroll at CCNE.

Because FMCSs have access to federal education funding, increasing their enrollment

would financially benefit the college.

Temple University actively recruits FMCSs through relationships with external

organizations that serve this population (Elfman, 2017). University representatives

partner with local veteran community centers, the local VA medical facility, and veteran

services offices at nearby colleges to collaborate on strategies to assist FMCSs and their

transition into higher education. Students are looking for a school that will meet their

college experience needs and prepares them for success after graduation (Adams-Johnson

et al., 2019). Johnson and Appel (2020) recommended that college and university leaders

be aware of the degree completion statistics for FMCSs who tend to enroll in programs that are in high demand. Therefore, effective recruitment strategies must consider what older FMCSs want from their educational experience at CCNE.

To increase FMCSs enrollment, admissions services recruitment specialists at CCNE must partner with internal and external partner organizations. The CCNE VSO, local veteran services organizations, VA medical facility, and the state office of veteran's services actively partner with the college to support FMCSs transition into higher education. The current relationship with these organizations can support the recruitment effort of older FMCSs and improve the diversity of this population at CCNE. Johnson and Appel (2020) reported that business degrees were the most popular for FMCSs, followed by health-related professions, law enforcement, fire-fighting, computer science, engineering, and education. CCNE offers associate degree programs in all of these popular majors, which will prepare FMCSs for employment in the local economy after graduation. Advertising the availability of these popular majors to older FMCSs could increase the probability they will enroll in an associate degree at CCNE.

Next Steps Following Policy Acceptance

Approval of this policy's recommendations will follow CCNE's guidance outlined in the institution's development and maintenance of college policies. The VSO will be responsible for overseeing the initiation of the new policy, monitoring its progress through the approval process, and ensuring compliance with all college policies. The VSO will periodically review the policy according to college guidelines and make recommendations. Input from college community members, the institutional accessibility

committee, student advisory committee, and faculty senate will inform the policy's

recommendations. The VSO will forward the proposed policy to the office of the

president for delivery to the office of the general counsel and subsequently to the

president's council for review. The president's council will provide recommendations to

the president, who is responsible for approving this policy.

Once this policy is approved, the director for diversity, retention, and recruiting

will coordinate the professional development recommendations. The VSO has

relationships with community partners dedicated to serving the FMCS population who

can provide input on professional development topics and access to hardcopy and

electronic resources for the college library and website. The college's library has a

physical location at all four campuses and can make hardcopy professional development

resources available. The library's web content manager can add links about hardcopy and

online professional development resources targeting FCMSs' success. The college

website has a link for professional development opportunities and can accommodate

additional links to online resources, videos, and face-to-face training information to help

the college community understand and support FMCSs.

CCNE's new student orientation program can expand to include modules specific

to FMCSs. The current online module requires modification to include VSO resources,

applying for military-connected education funding, links to academic and disability

services, and information about earning college credit for military experience. The

student success center will coordinate a face-to-face orientation to introduce FMCSs to

faculty, staff, and representatives from internal and external partner organizations so they

can learn about educational programs and registration, financial aid, and military-connected support services. The military-connected student orientation will centralize the resources that CCNE and partner organizations offer for FMCSs and provide an opportunity to connect with members of the college community dedicated to their academic success.

CCNE's research support can expand to include a committee focused on projects dedicated to FMCSs' academic success. In concert with a state university, CCNE's institutional research board can provide more significant opportunities for faculty and staff to expand their projects to include FMCSs. Faculty and staff can collaborate on studies focused on improving teaching strategies, counseling techniques, and leadership to improve FMCSs' graduation rate at CCNE and add to the scholarly literature.

The VSO maintains relationships with community partners that serve FMCSs. These relationships will support a recruitment effort for FMCSs over 25 years old. The VSO can collaborate with the local VA medical center, the state VA office, Student Veterans of America, and the Warrior-Scholarship Project to recruit older FMCSs to enroll in one of the CCNE associate degree programs. These organizations have counselors and mentors who work with veterans and active-duty personnel to help them transition into civilian life and higher education. The VSO can provide information on CCNE and the vast number of associate degree programs that may appeal to FMCSs interested in employment after graduation or transferring to a 4-year college or university. CCNE has a robust library service, professional development program, research collaboration with a state university, and strong relationships with community

partners. Therefore, implementing the new recommendations will require little or no additional resources.

      The FMCS graduation rate will determine the effectiveness of the policy recommendations. Many FMCSs may have previously earned college credit (Johnson & Appel, 2020) and enrolled part-time due to family and work responsibilities (Jenner, 2019). Furthermore, Juszkiewicz (2017) suggests a 6-year timeframe for a more realistic graduation rate. Therefore, graduation rate data should include full and part-time students who complete an associate degree within 6 years of their initial enrollment. Graduation rate data collected yearly by the college's OIRA will be used to evaluate the effectiveness of this policy paper's recommendations. Graduation rates should be monitored 2 years after implementing this policy because full-time students can complete an associate degree within 2 years and continue yearly for 4 years to determine if FMCS's success has improved.

Conclusion

      CCNE can benefit from new policies developed using research-based evidence targeting FMCS's academic success. This policy paper's recommendations focus on a college-wide approach to creating a safe and inclusive learning environment that promotes FMCS's success. These recommendations can improve FMCS enrollment and increase the monies from military educational funding programs. The college's organizational structure can support this policy paper's recommendations with little to no additional resources, with the funding from increased enrollment offsetting any additional

costs. Graduation rate data collected yearly, starting 2 years after policy implementation, will determine the recommendation's effectiveness.

This evidence-based policy paper's recommendations can improve FMCS's college experience and graduation rate and increase access to educational opportunities for this population of students at CCNE. A college-wide approach to supporting FMCSs' academic success requires the participation of college and external stakeholders to prepare graduates for career success and can actively participate in their local communities.

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