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PREDICTING MILITARY-CONNECTED STUDENTS' ACADEMIC SUCCESS AT COMMUNITY COLLEGE

Abstract

Federal GI Bills and funding have allowed military service members to attend institutions of higher learning since 1944. However, military-connected students tend to have lower graduation rates than other similarly situated nontraditional students despite this support. This study used secondary data from an associate-degree granting community college in New England that tracked degree completion rates for military-connected students to examine whether factors such as age, gender, race/ethnicity, or funding source could predict student success. No significant predictors were found. Future research ideas, such as quantitative studies using data from other colleges or universities or adding additional factors, were recommended. A policy paper was an outcome of the study.

Keywords: military-connected students, GI Bill, degree completion, graduation rates, secondary data projects, academic success

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Introduction

Graduating from college and earning a degree remains a goal, dream, or plan for many people in the United States. A degree helps pave the way to careers, job opportunities, home ownership, family security, and other perks of modern life. While many regularly debate the efficacy and value of higher education, data has shown that whether someone earns a degree may make the difference between a life of financial potential or hardship. The Association of Public & Land-Grant Universities (2023) cited data from the Federal Reserve Bank of New York (2019) showing that people with bachelor's degrees are half as likely to be unemployed as their peers with high school diplomas only, and they will earn on average, $1.2 million more than, over their lifetime, said peers. While a degree does not assure that someone will be financially successful, secure, or otherwise solvent, it has historically meant that the graduate's income potential increases after earning a degree. This study reviews how certain types of students, military-connected students, have access to the funding needed to earn a degree and examines the factors that play into whether that funding helps those students earn degrees. It also reviews a process of using existing secondary data to examine other potential success factors so that military-student researchers can add to the body of knowledge to assist military-connected students in earning degrees.

Background

Nontraditional students have become a significant part of the modern college tradition (Osam et al., 2017). Military-connected students, whether currently serving or veterans, fit into the definition of nontraditional students using the National Center for Education Statistics' (NCES) definition. However, Ford and Vignare (2015) advised caution in pigeon-holing military-connected students into the nontraditional definition if they did not fit. Paying for college remains difficult for all students, but even more so for nontraditional military-connected students. On June 22, 1944, the first U.S. GI Bill® (Servicemen's Readjustment Act of 1944) was passed and signed by President Franklin D. Roosevelt to assist returning World War II veterans with paying to go to college after providing service to the United

States. Since then, various methods of providing members of the U.S. military (both active duty and veteran) with funding for education have been created by Congress, state legislators, private funding sources, and other creative means. Many public, private, state, and community colleges provide specific support for military-connected students, and many cater specifically to those with military-funded sources. Yet, the graduation rates of military-connected students remain unsatisfactorily low, with a success rate of 54% reported between 2009 and 2013 (Cate et al., 2017). Because much of this study relies on specific terminology, the terms used in the study are defined prior to discussing the research problem.

Terms and Definitions

Community College Data Supplier (CCDS). This study used secondary data provided by a U.S. community college located in New England that received earmarked military education funding for military-connected students who enrolled in full- or part-time associate degree programs.

Guided Pathways. Baston (2019) reported that community colleges throughout the United States developed guided pathways 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. CCDS 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. These veterans, reservists, and active-duty personnel share some of the same nontraditional factors as their civilian counterparts (Johnson & Appel, 2020). For this study, they also needed to receive military funding.

Military Funding Programs: The funding programs at CCDS refer to Chapter 31 Veteran Readiness and Employment program (VRAP), Chapter 1606 Montgomery GI Bill Selected Reserve Benefit (MGIB-SR), and the GI Bill. The VRAP 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). Military-connected students 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 Student Factors. This study used the nontraditional student factors of age, gender, and ethnicity, previously used to predict academic success (Morrill & Somers, 2020).

Nontraditional Students. The NCES (2002) 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, or did not receive a conventional high school diploma.

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). CCDS offers college credit for prior learning from military service coursework, demonstrated technical proficiencies, and college-level testing.

Problem and Gap in Practice

With a 54% graduation rate, military-connected students struggle to complete degrees (Cate et al., 2017). The National Student Clearinghouse Research Center (NSCRC; 2022) stated that 62.3% of students who started college 6 years ago have completed a degree (citing the 2016 cohort completion rate). Taxpayers fund a great deal of the educational burden for these students; during the post-WW2 era, the original GI Bill provided veterans with money for college and to buy homes, creating an economic boom that helped create a prosperous economy for the generation known as Baby Boomers.

Since 1944, many subsequent GI Bills have passed and supported military-connected students with their education. Some examples of military funding support include Chapter 1606 Montgomery GI Bill Active-Duty Benefit (Ch. 1606), Vocational Rehabilitation and Employment Program (VRAP), Montgomery GI Bill Selected Reserve Benefit (MGIB-SR), and Post-9/11 GI Bill. In 2018, 900,000 military-connected students received nearly $12 million in educational benefits through military funding programs, but many did not complete their study programs or earn

degrees (Johnson & Appel, 2020). Johnson and Appel's data showed that only 10.4 percent of the monitored veteran students earned their degrees between 2011 and 2012. Further, "months to graduate" data showed that military-connected students earning a bachelor's degree in 2015-2016 took on average, 107 months (almost 9 years) to complete their degrees, more than twice as long as nonmilitary students (averaging 52 months, or just over 4 years, on average). However, they noted that data on this population is not well-monitored and difficult to analyze. Wenger and Ward (2022) cited Bogue, the United States Executive Director, Education Service, Veterans Benefits Administration, who testified to Congress that through July 2021, the United States has provided > $400 Billion to nearly 25 million military-connected students. Wenger and Ward (2022, Directions for Future Research) specifically called out the lack of tracked data regarding information about veteran students' "officer status, time deployed, military occupation, and education obtained while serving."

The impetus for this study was the low graduation rate (7%) of military-connected students at CCDS. Low graduation rates for military-connected students have multiple causes, including lack of support, lower engagement, increased diversity, interruptions due to deployments or station changes, and family obligations (Johnson & Appel, 2020). While researchers have identified graduation barrier, completion factors remain elusive (Spencer et al., 2023), and studies using existing data are needed. A gap in practice included a need to analyze and report the data available about this misunderstood population to enable educators, policymakers, and administrators to understand how to support military-funded students. This study aimed to assist in filling these gaps in practice at CCDS to offer solutions to the problem.

Applied Framework, Theory, and Literature Review

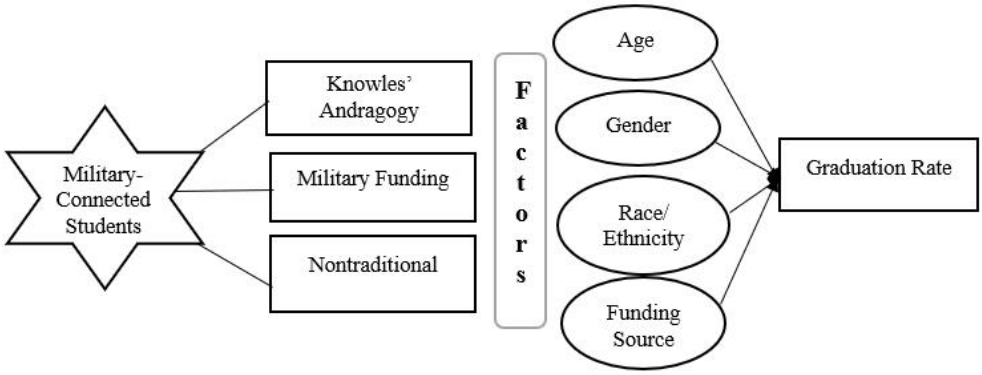
This article references a completed doctoral capstone project's data and analyses (Neimic, 2022) and provides additional insights into the stated problem of low graduation rates and lack of data regarding factors contributing to increasing those rates for military-connected students. The study used secondary data from CCDS and relied on Knowles's theory of andragogy as part of its framework. The population included military-connected students who received funding from military education programs between September 2013 and May 2019.

Applied Framework

Applied research uses frameworks built from known theories, concepts, populations, and problems that can be organized to address needed solutions better. Applied frameworks differ from theoretical or conceptual frameworks because they often include aspects that may not fit within a traditional quantitative or qualitative paradigm but instead include other elements to help logically guide the study. Santos et al. (2015) noted that applied frameworks are needed (but missing) from technology management and research studies. Application-styled research remains tenuous in scholarly research, where findings can immediately create actionable solutions. Figure 1 provides a diagram of the elements of this study that helped ideate and create practical solutions and recommendations for the problem involved.

Figure 1

Applied Framework



Note. The study used secondary graduation data from students who funded their associate degree program using military funding at a community college in the United States.

Theory of Andragogy

Knowles's theory of andragogy (1978) is a learning theory that acknowledges that adults learn differently from children. It differs from pedagogy (child learning) in many ways, mostly due to the unique characteristics of adults. Henschke (2011) called andragogy both art and science. Knowles's theory included two criteria: one includes the self-directed nature of adults (i.e., responsible for their own lives), and the second includes their additional adult responsibilities and roles, including wage earner, marital partner, parent, citizen, military service, and others (Taylor & Kroth, 2009). Thus, Knowles suggested that adults need learner-centric facilitated instruction rather than lecture or presenter-based instruction.

The military (Army, Navy, Air Force, Marine Corps, and Coast Guard) uses andragogy in their educational programs (Persyn & Polson, (2012). Their educational systems align with Knowles's assumptions within his theory (Zacharakis & Van Der Werff, 2012); an educator who uses his theory must assume that adult learners have previous experiences that may assist with learning, are self-directed, have a readiness to learn, desire learning oriented to solving real-life problems, have internal motivations to learn, and need to know the relevance of what they learn. Because the military training programs use Knowles's theory in creating career and military skills and educational programs, military veterans and students enter college training with this background. Self-directed learning has replaced much of instructor-based classroom training in the military (Flack & Reith, 2019). Thus, many military-connected students have experienced competency-based learning before attending universities, which still, in many ways, rely on traditional instructor-lecture-presentation-based instruction, even when recognizing that adult learners respond better to andragogical principles.

Literature Review

The study reviewed the literature discussing traditional and nontraditional students, academic success factors, and military funding programs. These segments help provide depth and understanding of the problems experienced by military-funded students and how those problems need additional research.

Traditional, Nontraditional, and Military-Connected Higher Education Students

Traditional students are often described as "a young adult who enrolls fulltime following high school, live on-campus and graduates four years after first enrolling" (Spencer et al., 2023, p. 1). Thus, nontraditional students tend to fall into every other category, including military-connected students, who remain a small but unique subset of nontraditional students.

Remenick (2019) reported that undergraduate enrollment trends for nontraditional students had increased, which was expected to continue (Chen, 2017). The NCES (2002) definition of nontraditional students included many of the regularly understood characteristics of a military-connected student. However, while military-connected students share nontraditional characteristics with their civilian counterparts, they have other unique characteristics, including military service work and experience (Johnson & Appel, 2020). Military-connected students often have specialized college resources and Veterans Affairs (VA) liaisons available, including medical and mental health resources.

Factors for Success

Age, gender, and ethnicity are factors that previous research has used to predict whether students will graduate (Morrill & Somers, 2020). DeCoster (2018) found that military-connected students can use their technical and soft skills acquired during their service to increase their academic success rates; further, because military-connected students are typically older, they have life experiences to apply to their studies. Juszkiewicz (2017) noted that students over 24 had a higher completion rate than those between 20 and 24. Female students typically graduate in higher numbers than their male counterparts (Williams-Klotz & Gansemer-Topf, 2018). However, the impact of gender on military student graduations had not been previously studied. Similarly, White students tend to graduate more often than minority students (Alyahyan & Düştegör, 2020; Morrill & Somers, 2020), but military correlations were not specifically known.

The definition of *success* can also be tenuous. Schools have different expectations for how many years of degree completion time should occur (i.e., average, typical, traditional) and how long a student can remain in a degree

program without completing. This study reviewed a specific dataset that used 6 years as the time frame for the expected graduation time, like Juszkiewicz (2017). The NSCRC (2022) used 6 and 8 years when reporting and comparing completion rates. Their reported rate of graduation for public, 2-year colleges for cohorts starting in 2013 after 6 years was 41.2% (compared to 7% for the military-connected 2013 cohort students at CCDS).

Military Funding Programs

While funding tends to be one of the most significant challenges to academic success noted in research (Jenner, 2017), military-connected students have historically and currently had access to government funding for education. The National Defense Acts of 1916 and 1920 led to the Reserve Officers' Training Corps (ROTC), but the First World War stifled the growth of the ROTC program. The Servicemen's Readjustment Act of 1944, post-World War II, sent approximately 2 million service members to colleges and universities on what is now called the GI Bill (Hammond, 2017; Stevens, 2018).

Changes and updates to the GI Bills occurred during and after 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 military-connected students 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, called Chapter 33, was used in this study.

The GI Bill provides military-connected students with more benefits than previous legislation, including tuition, fees, a living allowance, and book stipends (Hammond, 2017). More than 700,000 beneficiaries of the GI Bill enrolled in higher education in 2018, indicating a need to understand military-connected students' success rate and inform policymakers and taxpayers about the return on their financial investment (Johnson & Appel, 2020).

Other federal education benefits are available to servicemembers. The VRAP, formerly Vocational Rehabilitation and Employment, provides education funding for those 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 (U.S. Department of Veterans Affairs, 2022).

Research Technique

This study used a secondary dataset from CCDS to quantitatively examine whether demographic factors could predict the success rates of military-connected (and funded) students. A logistic regression technique supplied the analysis to enable the research questions to be answered. RQ1 reviewed only the factors known to be significant as a predictor in previous studies of nonmilitary students (age, race/ethnicity, gender); RQ2 included funding sources and age brackets to determine whether either could predict success.

Research Questions (RQs) and Hypotheses

RQ1: To what extent does gender, age, or race/ethnicity predict whether a military-connected CCDS student completes an associate degree within 6 years?

> $H1_0$: None of the factors, gender, age, or race/ethnicity, predicts whether a military-connected CCDS student completes an associate degree in 6 years.
>
> $H1_A$: At least one of the factors, gender, age, or race/ethnicity, predicts whether a military-connected CCDS student completes a 2-year associate degree in 6 years.

RQ2: To what extent does age bracket or funding source predict whether a military-connected CCDS student completes an associate degree within 6 years?

> $H2_0$: Neither age bracket nor funding source predicts whether a military-connected CCDS student will complete an associate degree in 6 years.
>
> $H2_A$: At least one age bracket or funding source predicts whether a military-connected CCDS student completes a 2-year associate degree in 6 years.

Participants

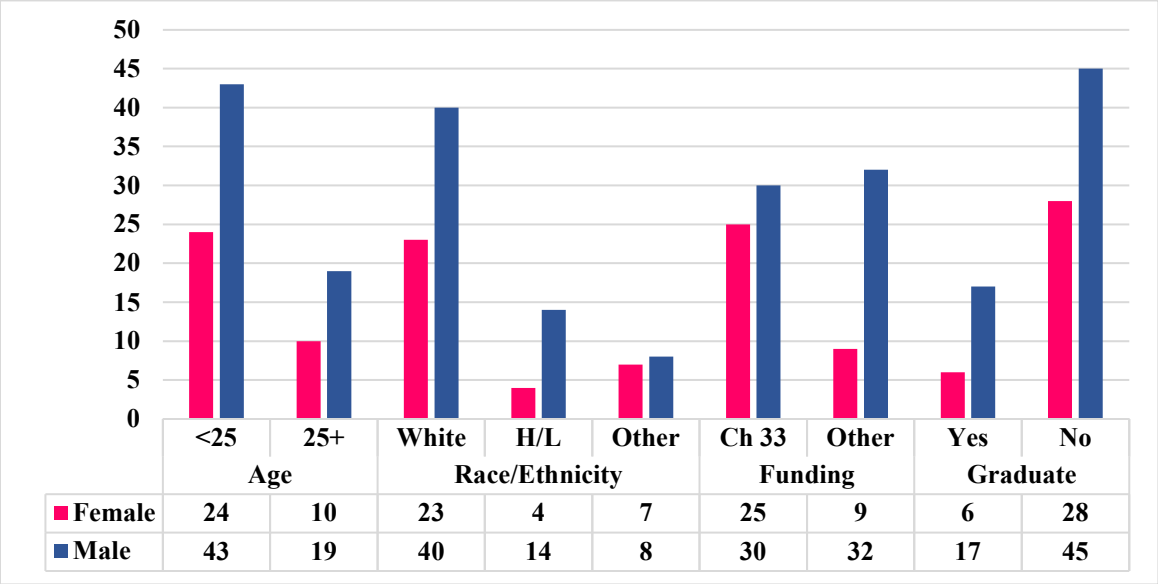
Participant data came from archived information about CCDS military-connected students. All the cases in the dataset came from students who were either veterans, reservists, or active duty and enrolled in their associate degree program in September of 2013 and who had either graduated or met the 6-year limit of time to achieve their associate-level degree by May 2019. A census sample was used.

Data from 2010-11 showed that out of 550 military-connected students at CCDS, 10% were full-time and 90% were part-time. Only 7% of the military-connected students who started their associate-level degrees in 2010-11 at CCDS graduated within 4 years (NCES).

The descriptive statistics for the census sample ($N = 96$) appear in Figures 2 through 5.

Figure 2

Depiction of the Sample Based on Gender

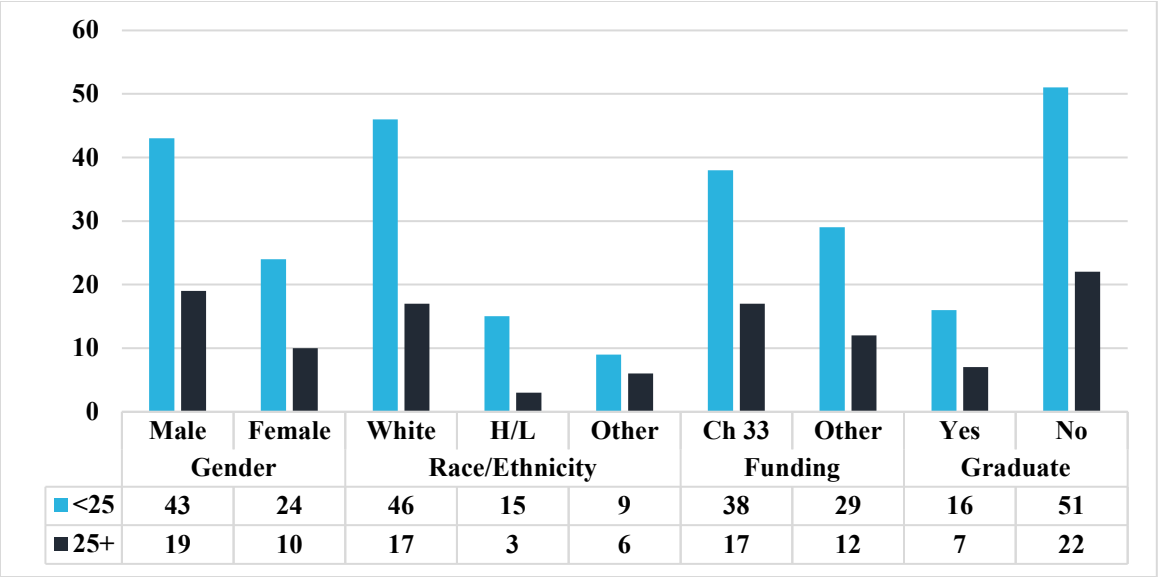


	Age		Race/Ethnicity			Funding		Graduate	
	<25	25+	White	H/L	Other	Ch 33	Other	Yes	No
Female	24	10	23	4	7	25	9	6	28
Male	43	19	40	14	8	30	32	17	45

Note. Race/Ethnicity: H/L = Hispanic or Latino, and other = Black, Native American, Alaska Native, or two or more races. Funding types are based on the specific GI Bill (other = Chapters 31 and 1606, and VRAP). Age brackets were under 25 (i.e., 17-24) and 25 and over. Age descriptives included M = 24.6, Mo = 18, and Mdn = 21.

Figure 3

Depiction of the Sample Based on Age

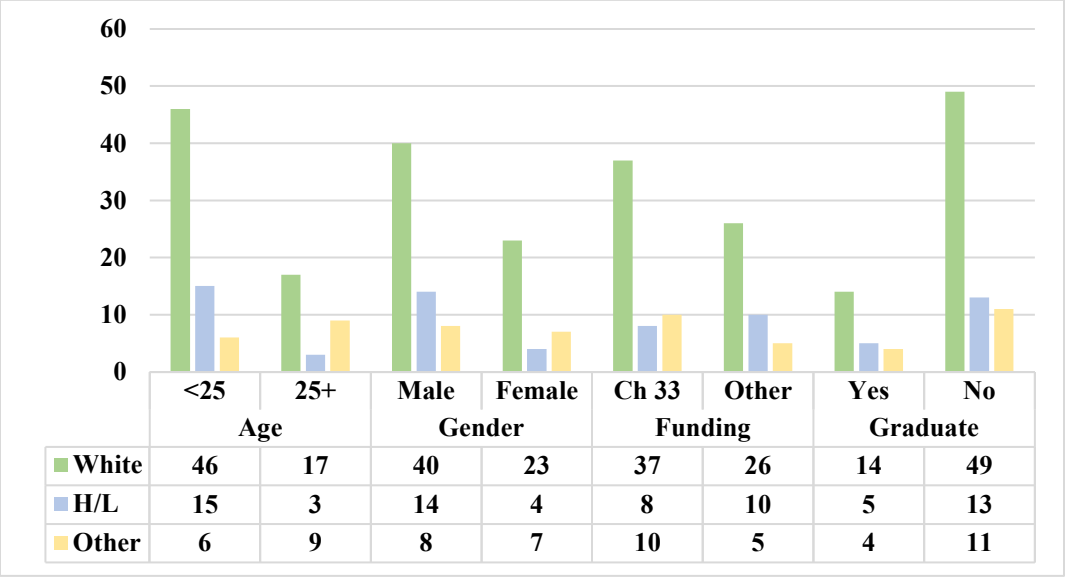


	Male	Female	White	H/L	Other	Ch 33	Other	Yes	No
	Gender		Race/Ethnicity			Funding		Graduate	
<25	43	24	46	15	9	38	29	16	51
25+	19	10	17	3	6	17	12	7	22

Note. Race other = Black, Native American, Alaska Native, or two or more races. Funding types are based on the specific GI Bill (other = Chapters 31 and 1066, and VRAP). Age brackets were under 25 (i.e., 17-24) and 25 and over. Age descriptives included M = 24.6, Mo = 18, and Mdn = 21.

Figure 4

Depiction of the Sample Based on Race/Ethnicity

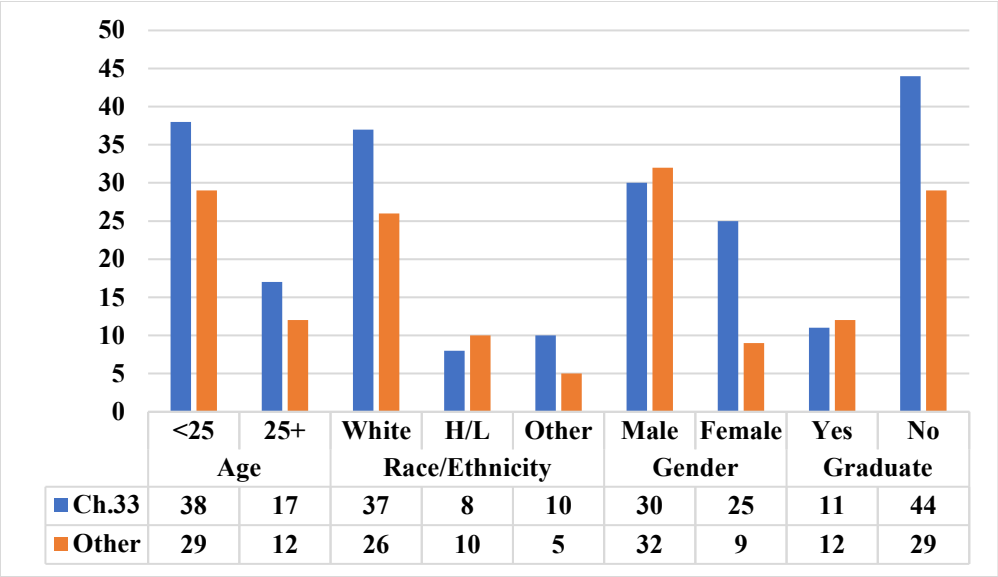


	<25	25+	Male	Female	Ch 33	Other	Yes	No
	Age		Gender		Funding		Graduate	
White	46	17	40	23	37	26	14	49
H/L	15	3	14	4	8	10	5	13
Other	6	9	8	7	10	5	4	11

Note. Race *other* = Black, Native American, Alaska Native, or two or more races. Funding types are based on the specific GI Bill (*other* = Chapters 31 and 1066, and VRAP). Age brackets were under 25 (i.e., 17-24) and 25 and over.

Figure 5

Depiction of the Sample by Funding Source



	<25	25+	White	H/L	Other	Male	Female	Yes	No
	Age		Race/Ethnicity			Gender		Graduate	
Ch.33	38	17	37	8	10	30	25	11	44
Other	29	12	26	10	5	32	9	12	29

Note. Race *other* = Black, Native American, Alaska Native, or two or more races. Funding types are based on the specific GI Bill (*other* = Chapters 31 and 1066, and VRAP). Age brackets were under 25 (i.e., 17-24) and 25 and over.

Data Collection and Analysis

The college had saved the data on Microsoft OneDrive and made the file available for the study. The data file was prepared for analysis. Data were requested for factors determined to have some predictive ability toward degree completion in previous studies. Data were analyzed using SPSS version 28.0.1.0.

Binomial logistic regression was used to determine whether any of the factors (age, race/ethnicity, gender, or funding source) predicted degree completion. Laerd Statistics (Lund & Lund, 2023) guided the analysis process. Binomial logistic regressions help predict probabilities when the outcome has only two possibilities, which, in this case, graduate within 6 years: *yes* or *no*. Results reporting was per Laerd's APA-based recommendations.

Assumptions

The logistic regression assumptions were met in that degree completion was dichotomous (yes/no), age was continuous, and gender, funding source, ethnicity, and age bracket were nominal; for each of the RQs, independence of observations existed, and at least 15 cases per independent variable (4*15 = 60; total cases were 96) existed. The continuous variable of age was linearly related to the logit of degree completion, as per a Box-Tidwell procedure (p = .79, not significant). Only one continuous variable existed in the sample (age, for RQ1 only); therefore, no multicollinearity was found (Park, 2013). No significant outliers were found due to no cases with a standardized residual less than +/- 2 (Laerd Statistics, 2023). Age bracket and age exhibited multicollinearity and were not included in the same examination (age, continuous, in RQ1 and age brackets, nominal, in RQ2).

Results

RQ 1 asked whether age (17 and up), race/ethnicity, or gender could predict someone's graduating within 6 years. The Hosmer and Lemeshow test for goodness of fit results were p = .281; thus, the model was a good fit. However, the regression model, $\chi^2(4) = 1.56$, p = .82, not significant, failed to reject the null hypothesis. The Nagelkerke R^2 = .024; only 2.4% of the total variance was explained by the age, gender, and ethnicity variables, and no factor was significant.

RQ 2 asked whether age bracket (ages 17-24, or 25 and over) or funding source might predict someone's graduating within 6 years. Hosmer and Lemeshow's test for goodness of fit results were $p = .893$; thus, the model was a good fit. However, the regression model, $\chi^2(3) = 1.42$, $p = .70$, not significant, failed to reject the null hypothesis. The Nagelkerke $R^2 = .022$; only 2.2% of the total variance was explained by age bracket or funding source.

Discussion and Implications

For each research question, the null hypothesis was not rejected; no factors in the models significantly predicted whether a military-connected student at CCDS would complete their degree program in the allotted 6 years. Thus, the census sample of CCDS military-connected students who began their program in 2013 and received military funding to pay for their degrees were different than other nontraditional students.

Significant limitations existed in the dataset, including having no way to track which students were deployed during the study, which students were moved to other bases, or which students left for other institutions and completed degrees there. Data were not available for the armed forces branch, years of military experience, number of deployments before enrollment, and the enrolled degree program.

Other differences in these data exist. Previous studies looked at completion rates of 4-year degrees, as opposed to 2-year degrees. Further, Wagner and Long (2020) noted statistics that the average age of the military-connected student in higher education is 34 (citing Borsari et al., 2017). The CCDS population was surprisingly high in the under-25 age demographic ($n = 64$; $N = 96$); often, students who begin higher education at age 17 or 18 plan to take a few courses before transferring to 4-year institutions, and 27 of the students in the study (28%) were 17 or 18. Unfortunately, the dataset did not provide course, curriculum, or degree plans for the students (except for those who graduated).

Mobley et al. (2022) noted that military-connected students experience far more barriers to success than traditional students. They quoted one student admitting they felt "'between a rock and a hard place'" between their grades or their reporting officer, and often, the grades "lost the battle" (p. 231). My study's nonsignificant findings mirror previous and current studies' findings, showing that military-connected students need particularly focused assistance, support, and research about what might help them succeed. The data from CCDS showed that gender, age, funding source, and ethnicity did not predict degree completion. Further research is needed.

The literature showed that gender, age, and ethnicity did impact degree completion, including that nontraditional White females, ages 25 to 29, had higher graduation rates than traditional males. Literature also cited "lack of funding" as why many students leave higher education, regardless of other factors. The results of this study did not show that gender, age, race/ethnicity factors were significant in the studied CCDS population. Suggested research studies include the following:

> ***Quantitative Study Topics:*** Canvassed and thorough studies on military-connected student completion rates at various colleges throughout the United States are needed for comparisons that include additional variable data, such as degree program, armed services branch, marriage status, number of dependents, transfer degree completion success, deployments, experience years, and other potential factors for success.
>
> ***Qualitative Study Topics*:** Case studies or generic inquiry studies could elicit interview data from military-connected students to ask them why they did or did not complete their degrees; interviews of faculty with known success rates for military-connected students might identify potential success factors for helping them complete their degrees.

Conclusion and Practical Application

While having nonsignificant findings can deter research progress by leaving results unclear, in this case, it opened the door for additional communication and consideration with educators who were involved in this research project. The result was that the educators involved in the post-results discussions recommended that I write and publish a policy paper regarding providing support and potential solutions for helping military-connected students.

In my study, I was thankful to receive secondary data, which led me to the results discussed here. After considering the results and findings, I recommend that future researchers request secondary data, if it exists, regarding the following factors, which could have potential predictive qualities: branch of the military, program of study, degree

types, specialization, time served in the military, education from or during the military, job or role in the military, enlisted service member or officer status, and any earned prior learning credits.

U.S. taxpayers spend significant tax dollars to support service members through completing higher education degrees, yet their success rates remain less than desired. Thus, this research article includes a practical call for research to others in this field, and especially to other students working on educational master's and doctoral degrees, in hopes that they will consider requesting secondary completion data for military-connected students at colleges and universities throughout the United States. These studies increase the knowledge base about success factors for military-connected students. Further, it could also provide needed topical ideas for students desiring to complete research studies in this area. Please cite this article as the basis of the "need for the study" section of your doctoral proposals.

References

Alyahyan, E., & Düştegör, D. (2020). Predicting academic success in higher education: Literature review and best practices. *International Journal of Education Technology in High Education 17(*3), 1-21. https://doi.org/10.1186/s41239-020-0177-7

Association of Public & Land-Grant Universities. (2023). *How does a college degree improve graduates' employment and earnings potential?* https://www.aplu.org/our-work/4-policy-and-advocacy/publicuvalues/employment-earnings/#11

Bailey, A. K., Drury, M. B., & Grandy, H. (2017). Student veterans' academic performance before and after the Post–9/11 GI Bill. *Armed Forces & Society, 45*(1), 101–121. https://doi.org/10.1177/0095327x17737283

Baston, M. A. (2019). Elevating student affairs practice in community college redesign. *Community College Journal of Research and Practice, 42*(11), 812-817. https://doi.org/10.1080/10668926.2018.1446057

Bergman, M., & Herd, A. (2017). Proven leadership = college credit: Enhancing employability of transitioning military members through prior learning assessment. *Advances in Developing Human Resources, 19*(1), 78–87. https://doi.org/10.1177/1523422316682949

Borsari, B., Yurasek, A., Miller, M. B., Murphy, J. G., McDevitt-Murphy, M. E., Martens, M. P., Darcy, M. G., & Carey, K. B. (2017). Student service members/veterans on campus: Challenges for reintegration. *American Journal of Orthopsychiatry, 87*(2), 166. https://doi.org/10.1037/ort0000199

Cate, C. A., Lyon, J., Schmeling, J., & Bogue, B. Y. (2017). National Veteran Education Success Tracker: A report on the academic success of student veterans using the Post-9/11 GI Bill. Student Veterans of America. https://studentveterans.org/wp-content/uploads/2020/08/NVEST-Report_FINAL.pdf

Chen, J. C. (2017). Nontraditional adult learners: The neglected diversity in postsecondary education. *SAGE Open. 7*(1), 1-12. https://doi.org/10.1177/2158244017697161

DeCoster, V. A. (2018). The needs of military service veterans returning to college after service. *International Journal of Arts & Sciences, 11*(1), 11-19. https://www.universitypublications.net/ijas/1101/pdf/B8T177.pdf

Flack, N., & Reith, M. (2019). Self-directed learning tools in USAF multi-domain operations education. *Proceedings of the European Conference on Cyber Warfare & Security,* 752–759.

Ford, K., & Vignare, K. (2015). The evolving military learner population: A review of the literature. *Online Learning, 19,* 7-30. https://eric.ed.gov/?id=eJ1061492

Hammond, S. (2017). Student veterans in higher education: A conversation six decades in the making. *New Directions for Institutional Research, 2016*(171), 11–21. https://doi.org/10.1002/ir.20191

Henschke, J. A. (2011). Considerations regarding the future of andragogy. *Adult Learning, 22(*1), 34–37. https://doi.org/10.1177%2F104515951102200109

Jenner, B. M. (2017). Student veterans and the transition to higher education: Integrating existing literatures. *Journal of Veterans Studies, 2*(2), 26-44. https://doi.org/10.21061/jvs.14

Johnson, G., & Appel, S. (2020). Military-connected students in higher education. *Change: The Magazine of Higher Learning, 52*(1), 30–36. https://doi.org/10.1080/00091383.2020.1693821

Juszkiewicz, J. (2017, November). Trends in community college enrollment and completion data, 2017. *American Association of Community Colleges.* https://vtechworks.lib.vt.edu/bitstream/handle/10919/86967/CollegeEnrollment2017.pdf?sequence=1&isAllowed=y

Laerd Statistics. (2020). *Binomial logistic regression using SPSS Statistics. Statistical tutorials and software guides.* https://statistics.laerd.com/

Lund, A., & Lund, M. (2023). *Laerd statistics.* https://statistics.laerd.com/aboutus.php

Mobley, C., Lord, S. M., Main, J. B., Brawner, C. E., & Murphy, J. (2022). "Stepping Out" for military service: Challenges experienced by students serving in the Reserves or National Guard. *Journal of Veterans Studies, 8*(3), 222–238. https://doi.org/10.21061/jvs.v8i3.346

Morrill, S., & Somers, P. A. (2020). From benefits to success: Veterans' educational outcomes in the post-9/11 era. *Community College Journal of Research and Practice, 44(*9), 629-643. https://doi.org/10.1080/10668926.2019.1629127

National Student Clearinghouse Research Center. (2022). *National college completion progress rate stalls.* https://www.studentclearinghouse.org/nscblog/national-college-completion-progress-rate-stalls/

National Center for Education Statistics. (2002). Institute of Education Sciences, U.S. Department of Education. U.S. Department of Education. Nontraditional undergraduates: NCES 2002-12. https://nces.ed.gov/pubs2002/2002012.pdf

Neimic, S. (2022). Factors that predict military-connected student academic success at a community college. [Doctoral Capstone Project Study]. Walden University. ProQuest, 29210763. https://eric.ed.gov/?id=ED627779

Osam, E. K., Bergman, M., & Cumberland, D. M. (2017). An integrative literature review on the barriers impacting adult learners' return to college. *Adult Learning, 28*(2), 54–60. https://doi.org/10.1177/1045159516658013

Park, H.-A. (2013). An introduction to logistic regression: From basic concepts to interpretation with particular attention to nursing domain. *Journal of Korean Academy of Nursing, 43*(2), 154-164. https://doi.org/10.4040/jkan.2013.43.2.154

Persyn, J. M., & Polson, C. J. (2012). Evolution and influence of military adult education. *New Directions for Adult & Continuing Education, 2012(*136), 5–16. https://doi.org/10.1002/ace.20031

Remenick, L. (2019). Services and support for nontraditional students in higher education: A historical literature review. *Journal of Adult and Continuing Education, 25*(1), 113–130. https://doi.org/10.1177/1477971419842880

Santos, C., Araujo, M., & Correia, N. (2015). Towards a classification of technology strategy frameworks. In E. Pimenidis & M. Odeh (Eds.) *9th European Conference on IS Management and Evaluation: ECIME 2015*. https://repositorium.sdum.uminho.pt/bitstream/1822/53249/1/Paper%20ECIME%202015%20-%20Towards%20a%20Classification%20of%20Technology%20Strategy%20Frameworks.pdf

Spencer, G., de Novais, J., Chen-Bendle, E. C., & Ndika, E. (2023). A dream deferred: Post-traditional college trajectories and the evolving logic of college plans. *The Journal of Higher Education.* https://doi.org/10.1080/00221546.2023.2216611

Stevens, M. L. (2018). Higher education politics after the Cold War. *Change, 50*(3/4), 13–17. https://doi.org/10.1080/00091383.2018.1507232

Taylor, B., & Kroth, M. (2009). Andragogy's transition into the future: Meta-analysis of andragogy and its search for a measurable instrument. MPAEA *Journal of Adult Education, 38*(1), 1–11. https://eric.ed.gov/?id=EJ891073

U.S. Department of Veterans Affairs. (2022, September 23). Montgomery GI Bill Selected Reserve (MGIB-SR). *VA.gov.* https://www.va.gov/education/about-gi-bill-benefits/montgomery-selected-reserve/

Wagner, B. A., & Long, R. N. (2020). From start to finish: What factors inhibit student veterans' completion? *Journal of College Student Retention: Research, Theory & Practice, 24*(3), 631-649. https://doi.org/10.1177/1521025120935118

Wenger, J. W., & Ward, J. M. (2022). The role of education benefits in supporting veterans as they transition to civilian life. *RAND Corporation Expert Insights.* Article PE-A1363-4. https://doi.org/10.7249/PEA1363-4

Williams-Klotz, D. N., & Gansemer-Topf, A. M. (2018). Examining factors related to academic success of military-connected students at community colleges. *Community College Journal of Research and Practice, 42(*6), 422-438. https://doi.org/10.1080/10668926.2017.1339647

Zacharakis, J., & Van Der Werff, J. A. (2012). The future of adult education in the military. *New Directions for Adult and Continuing Education, 2012*(136), 89–98. https://doi.org/10.1002/ace.20038

