

**Examining the Effect, a First Year Experience Course has on Community College
Student Persistence**

By

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DEDICATION

This study is dedicated...

To my husband, Peter, who has been my source of strength when I wanted to give up. He continually provided me with the emotional support when needed. He recognized when I needed a distraction and was always there to bring a smile to my face. I am grateful for the confidence you have for me and appreciate all of your support.

To my children, Rachel and Clayton, and Rachel's boyfriend, Sam. Thank you for always being my reasons of why I worked so hard to finish this degree. I hope that my ability to finish this journey is a reminder that you can do anything. Yes, you can do hard things!

To my brother, Patrick and my father, Terry, for their support from far away. Thank you for always having confidence in me!

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ABSTRACT

Persistence, along with retention and completion initiatives, are the focus of institutions of higher education, especially community colleges. There are initiatives that focus on student success that start at orientation and revolve around connecting the student to the college. Students often arrive on campus with a minimal understanding of the what the next two-years at the community college will involve and student success initiatives help students learn how to navigate this journey. The concept of the First-Year Experience Course allows for students to dive deeper into the college experience by learning about time management, organization, campus resources, career exploration, and self-reflection.

This study investigated the effect the First-Year Experience course had on student persistence at Volunteer State Community College, a two-year institution located in Gallatin, Tennessee. The research examined archived data provided by the Research, Assessment, and Special Initiatives department. Multiple Chi-square analysis were performed using the variables: completion of the First-Year Experience Course, age, race, and gender to determine their association on student persistence. The completion of the First-Year Experience Course, as well as age, did not have an association with persistence. However, there was a significant association between race and gender on student persistence.

Based on the results of this study, further examinations of the First-Year Experience course and persistence should be completed in the context of a qualitative research design to allow for a narrative description of student experiences as it pertains to persistence. Additionally, the recommendations for future research and practical

applications include increasing the sample to include all community colleges within the state to provide a larger representation of students.

TABLE OF CONTENTS

	Page
LIST OF TABLES	
LIST OF FIGURES	x.
CHAPTER 1.: INTRODUCTION	1.
Problem Statement	1.
Initiatives to Improve Persistence	2.
Introduction to Volunteer State Community College	3.
Characteristics of First Year Experience	4.
Effects First Year Experience Courses	5.
The Impact of the Pandemic on Persistence	6.
Statement of Purpose	7.
Research Question	7.
Research Hypothesis	8.
Definition of Terms	8.
Limitations	9.
Delimitations	10.
CHAPTER II.: REVIEW OF LITERATURE	12.
Introduction	12.
Persistence	13.
Persistence and Community College Students	13.
Tinto's Theory of Departure	15.
Influences on Student Persistence	19.

The Role of Faculty on Student Persistence	23.
Pandemic’s Impact on Student Persistence	26.
Student Demographics Effect on Persistence.....	28.
Gender	29.
Age	30.
Race	31.
Student Success	34.
Student Success Initiatives	35.
First-Experience Course.....	37.
Holistic Approach to the First-Year Experience	41.
High Impact Practices	42.
Community College Students.....	45.
Tennessee Promise	46.
Chapter Summary	48.
CHAPTER III.: METHODOLOGY	49.
Subjects	49.
Research Design	50.
Analysis of the Data	51.
Chi-Square Test Analysis	53.
Chi-Square Assumptions	54.
Chapter Summary	54.
CHAPTER IV.: RESULTS	55.
Introduction	55.

Descriptive Statistics	55.
Chi-Square Test of Independence Analysis	57.
Chapter Summary	62.
CHAPTER V.: DISCUSSION	64.
Conclusions and Recommendations	66.
Limitations	70.
Future Research Applications	71.
Future Practical Applications	74.
Chapter Summary	75.
REFERENCES.....	77.

LIST OF TABLES

Table 1. Students enrolled in Community College Using Tennessee Promise.....	29.
Table 2. Characteristics of Students that have Taken and Not Taken FYEX courses	40.
Table 3. Frequencies among FYEX and Persistence	41.
Table 4. Frequencies among Gender and Persistence	42.
Table 5. Frequencies among Race and Persistence	43.
Table 6. Frequencies among Age and Persistence.....	45.

LIST OF FIGURES

Figure1. Tinto and Cullen's Theoretical Dropout Model	28.
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Chapter I.

INTRODUCTION

Problem Statement

The topic of student persistence is a focus point of many institutions of higher education. The reality of decreasing persistence is even lower at the community college. The data illustrates the nearly half of all community college students exit campus prior to finishing their designated programs (Windham, Rehfuss, Williams, Pugh, and Tincher-Ladner, 2014). The dwindling persistence at community colleges is reason to implement change that can promote student success while increasing persistence. Since the bulk of the research studies are focused on four-year students it is necessary for relevant studies based on two-year institutions and how they are making improvements in student success (Windham et al, 2014). Because community colleges serve a different demographic than four-year institutions and have large scope of service it is important for research to focus on community colleges (Stewart, Lim, Kim, 2015). However, the limited research that is community college specific has not hindered attempts to increase persistence.

Community colleges, like Volunteer State Community College, have implemented a First-Year Experience Course (FYEX) to help increase student persistence. However, there is not enough research focused on the impact FYEX courses have on student persistence at community colleges. The purpose of this study is to examine the impact of the First-Year Experience Course has on student persistence at Volunteer State Community College.

Initiatives to Improve Persistence

Community colleges are finding creative ways to increase persistence. A few campus initiatives that are proven to increase persistence and completion rates are initiatives that concentrate on first-year experiences (including orientation), clear learning pathways for students, and experiential learning activities (Matthews, 2018). Student success initiatives vary from campus to campus, and it is important for initiatives to meet the needs specific to the campus demographics (Matthews, 2018).

Helping students transition from high school to college and provide them the opportunity to be successful is a challenging task. However, many institutions are willing to accept the challenge. Students arrive on campus not truly understanding what to expect from their college experience (Tinto, 1993; Blanchard, 2018). Furthermore, administrators have noted that students seem to have minimal understanding of what is expected of them (Hunter, 2021). All these components should be done within the context of career planning (Nicoletti, 2019). Student success initiatives vary from campus to campus, and it is important for initiatives to meet the needs specific to the campus demographics. Administrators of higher education institutions recognize the challenges that face new student (Stuart et al., 2014).

Campuses are implementing ideas that help with graduation and persistence because they are being influenced by external funding and looking for ways to bring students on campus that will stay and graduate (Hunter, 2021). Hunter takes the time to look at the importance of connections to the campus and the impact on student success. The development of connecting to the campus can be done through many of the first-year experiences students are expected to participate. Student success is a campus wide

responsibility, and the implementation of similar systems should be the focus of faculty and staff (Hunter, 2021).

Institutions use orientations as a tool used to help new students with the transition to the on-campus experiences. Since the evolution of student success, orientations are no longer a stand-alone agenda, but an initiative developed to help support students. At many universities and community colleges, orientation begins at the time of acceptance and continues into the first year (Zhang et al., 2016). This process is known to help with student and persistence strategies and crucial to the first-year enrollment process. The shift from a one-day orientation to a year-long system is supported by documented research.

New-student orientations have moved from the antiquated model of disseminating information and touring campus to a new model of community- building events (Cuseo, 2010). Community-building allow new students to connect with each other and interacting with peer mentors, faculty, and staff from student affairs. Again, it is important to recognize that student connections and interpersonal interactions have a large role in student success. A new-student orientation provides the student with many opportunities to begin to establish connections to campus (Zhang et al., 2016).

Introduction to Volunteer State Community College

Persistence at the community college level can always improve and the implementation of the Quality Enhancement Plan in 2020 at Volunteer State Community College illustrates an institution of higher education recognizing the importance of persistence. The college is a public two-year institution providing educational opportunities to residents of eleven counties in the northern part of middle Tennessee.

The college offers courses at the Main Campus in Gallatin, in Livingston at the Livingston Center, the Cookeville Higher Education Campus, and Highland Crest in Springfield. Volunteer State Community College offers programs that culminate in associate degrees in arts, sciences, fine arts, applied science, teaching, and certificates. Full-time students represent 56% of the college population with 79% of these students being younger than 25 years of age (volstate.edu/factbook). The college provides student support services to the various student populations such as adult learners, underprepared students, dual-enrolled students, first generation students, veterans, and part-time students.

Characteristics of First Year Experience Courses

Community colleges have started to take the concept of new student orientation one step further with the implementation of a First-Year Experience (FYEX) course (Khang et al., 2018). Many institutions are recognizing that happens when students are prepared and feel connected to the institution (Acevedo-Gil & Zerquera, 2016). The FYEX model varies from institution to institution but typically is offered during the first semester or the academic year (Khang et al., 2018). The purpose of the FYEX model is to meet the needs of the diverse student population while recognizing the need to connect with students at the start of their academic careers (Matthews, 2018).

At Volunteer State Community College, the FYEX course is delivered in two sections (FYEX 1030 and 1040). The decision to offer the FYEX course was centered on national research that implies that providing students with a first-year course have a significant effect on student outcomes including persistence and retention (Cueso, 2010). Over the past twenty years that have been a study on various types of first- year courses

and seminars which included self-reported outcomes from 31000 students attending 62 institutions of higher education (Swing, 2002). The study suggests that transition seminars and courses focused on academic and holistic topics had better outcomes for students (Swing, 2002).

In the spring of 2020 Volunteer State Community College implemented a FYEX pilot program with five sections of the FYEX 1030 course. Since the spring of 2020, FYEX 1030 and FYEX 1040 were offered until the spring of 2023. The FYEX 1030 course included opportunities for students to explore various strategies for college success. Campus resources, college culture and traditions, personal responsibility, self-motivation, self-management, self-awareness, and emotional intelligence were the focus of the course. FYEX 1040 included career exploration topics such as career exploration, resume and cover letter writing, interview skills, and soft skills. The design of both courses allowed for a majority of the FYEX 1030 courses offered in the fall and the FYEX 1040 in the spring. The delivery of both courses over two semesters allowed students to engage in a full first-year experience to increase persistence.

Effects of First Year Experience Courses

The minimal amount of research and evidence revolving around the FYEX courses at the community college level illustrate a positive impact on persistence for students completing the FYEX course work (Hatch et al, 2018). The FYEX course allows for students to begin to develop self-efficacy skills. The course provides an environment for students to believe in their abilities and see the impact of their individual efforts. When students have a high level of self-efficacy, they realize the control they have over their personal academic success (Cuseo, 2016). Other noteworthy impacts of FYEX

students are establishing a strong network of peers, development of time management skills, and improved metacognition skills (Hatch et al., 2018).

The FYEX course allows for the development of connections and belonging, both being key indicators for increased persistence (Hausmann, Ye, Scholfield, & Woods, 2009). At Volunteer State Community College, three key components compose the FYEX process. 1.) Smaller, student focused orientation sessions. 2.) New student convocation to familiarize students with the campus. 3.) FYEX course which is composed of two 1.5 credit hour courses designed to provide academic success and career readiness. The combination of all three components allows opportunities for the promotion of connection, belonging, and self-awareness.

The Impact of the Pandemic on Persistence

The pandemic created an environment that caused for a re-assessment of the typical way of doing things within higher education. The pandemic disrupted the traditional academic processes that allowed for the establishment of meaningful relationships with students and faculty. Faculty had to quickly establish supports that allowed for student connections during the pandemic (Coley, 2021). Faculty members found themselves looking for new strategies to develop personal and up-close insight to student's behaviors in the virtual classroom (Coley, 2021) The result of the pandemic was reduced completion rates and low enrollment. The onset of the pandemic slowed down the enrollment increase that has occurred at community colleges over the last ten years (Camardelle, Kennedy, & Nalley, 2022). Since the spring of 2020 there has been a significant drop in enrollment however persistence rates remained steady.

A study completed by the Public Policy Institute of California suggests that community colleges experienced challenges during the pandemic. Students attending community colleges tend to have less resources than students at four-year institutions and were more likely to have been affected negatively by the pandemic (PPIC, 2022). However, enrollment decreases can also be traced to the increase in wages for people who do not have college degrees in turn appealing to students as a better alternative to community college (PPIC, 2022). Community colleges must find creative ways to entice students back to campus.

Statement of Purpose

Due to an increase in focus of student success based on student persistence rates at the community college, the implementation of First Year Experience courses is a possible impactful solution to increasing student persistence rates. The purpose of this study is to examine the impact the First-Year Experience Course has on student persistence at Volunteer State Community College.

Research Questions

1. Is there an association between student completion of the First Year Experience course and persistence at Volunteer State Community College?
2. Is race associated with student persistence at Volunteer State Community College?
3. Is biological sex associated with student persistence at Volunteer State Community College?
4. Is age associated with student persistence at Volunteer State Community College?

Research Hypothesis

H₁: Completion of the First Year Experience Course is associated with student persistence at Volunteer State Community College.

H₂: Race is associated with student persistence at Volunteer State Community College.

H₃: Biological sex is associated with student persistence at Volunteer State Community College.

H₄: Age is associated with student persistence at Volunteer State Community College.

Definition of Terms

1. Community College- two-year institutions that provide postsecondary education at an affordable rate as a route to a four-year degree (<https://studyinthestates.dhs.gov>)
2. First Generation College Student- students who are enrolled in postsecondary Education and whose parents do not have any postsecondary education experience (<nces.edu.gov>).
3. First-year Experience- a comprehensive and intentional approach to the first college year. (WWC Intervention Report What Works Clearinghouse U.S. Department of Education, 2016).
4. Graduation rate- calculated percentages of students who graduate or complete their program within a specific timeframe (IPEDS, 2017).

5. High-impact practices- according to the Tennessee Board of Regents, a pedagogical approach which requires an investment of time and energy over an extended period that has usually positive effects on student engagement in educationally purposeful behavior (www.tbr.edu).
6. Non-traditional student- (IES>NCES definitions and data nontraditional undergraduates) students that fit into certain criteria that identifies them as not typical students (delayed enrollment, financial and family status, and/or high school graduation status) (nces.ed.gov).
7. Persistence- the process of keeping students enrolled from one semester to the next (MSM Higher ED).
8. Student Success- (At the community college) “Increasing the number of students from different backgrounds proportionate who participate in postsecondary attainment who participate in high-quality educational programs, practices, and resources that enable them to be economically self-sufficient and civically responsible post college” (Kinzie, 2020).
9. Traditional student- students who have completed high school, are under the age of 25 and attend college full-time (nces.ed.gov).

Limitations

The limitations associated with this study are the analysis of data collected is from Volunteer State Community College and may not represent the other community colleges in the state of Tennessee. The group of students that completed the First Year Experience Course was limited to students who completed the course within 2019 through 2022, which may not illustrate a full depiction of all students (traditional and non-traditional

students) and how the course impacted their academic success and persistence. This creates a limitation of sample size due to the number of students required to complete this course in the first semester.

Additionally, this study is only looking at persistence of students that have completed the First-Year Experience Course and not the data collected from students who complete the Student Success Course. The Student Success Course was implemented at the beginning of the Tennessee Promise.

Delimitations

This study is limited to students that have completed the First Year Experience Course at Volunteer State Community College. The population reviewed were both traditional and non-traditional students. Previous research on this subject focused on First Year Experience Courses at four -year institutions and suggested that successful completion of the First Year Experience Course increased student persistence. The proposed study will focus solely on students enrolled at Volunteer State Community College. This study will use gender and first-generation student status as variables to examine the impact of the First Year Experience Course on student persistence. The proposed research study will sample across multiple cohorts to examine the yearly rate of student persistence numbers for the purpose of creating a broader and more diverse sample to promote a greater amount of generalizability.

The cohort groups may not represent all students at Volunteer State Community College. By focusing on gender and first-generation status, the investigator is able to create an adequate sample to determine the impact the First Year Experience Course has

on student persistence. The results of this study will produce a persistence rate analysis that may be generalizable across all Community Colleges across the State of Tennessee.

Chapter II Literature Review

Introduction

The review of literature is to investigate current research related to student persistence at the community college level. The topic of student persistence and graduation rates are focus points of many institutions of higher education. The reality of decreasing persistence and graduation rates is even lower at the community college (Windham, Rehfuss, Williams, Pugh, and Tincher-Ladner, 2014). The data illustrates the nearly half of all community college students exit campus prior to finishing their designated programs (Windham, et al, 2014). The community college persistence rates across the country hover around 50% which suggests that half of students at community colleges are leaving in their first year (National Clearinghouse Research Center, 2017). The dwindling graduation rates at community colleges is reason to implement change that can promote student success while increasing persistence. The bulk of the research studies are focused on four-year students, it is necessary for relevant studies based on two-year institutions and how they are making improvements in student success (Windham, et al, 2014). This literature review discusses the opportunities and obstacles (academic and non-academic) students experience while enrolled at community colleges.

There is a distinct disconnect that becomes evident in the first year of college; this disengagement is seen in a student's academics (study habits, time management, class preparation) to a student's ability to think critically (Marina & McGuire, 2008). Higher education institutions in the United States have taken steps to reduce the disconnect by establishing a first-year experience process that put emphasis on increasing student

interactions with peers and faculty, becoming involved on campus, and increasing academic expectations (Barefoot, 2000). Additionally, research illustrates that “students involved in some type of organized first-year intervention report higher levels of satisfaction and involvement in campus activities, achieve higher grades and are more likely to be retained and graduate” (Jamelske, 2009). Community colleges recognize the need for planned opportunities to help students develop a solid foundation.

The literature explored provides insight to the student and motivation to succeed. The result leads to the importance of providing students with the skills needed to persist and to complete a college program. According to Stewart, Lim, and Kim (2015), “If students do not resolve transition issues in the first year...the likelihood of persisting at the same institution is diminished.” Does the implementation of a First-Year Experience Course increase student persistence rates of community college students?

Persistence

Persistence and Community College Students

Persistence, defined by MSM Higher ED, is the process of keeping students enrolled in institutions of higher education from one semester to the next. According to the research completed by Tinto (1993, 1997), student departure theory allows institutions of higher education to examine demographic characteristics, student behaviors, and institutional systems to decipher individual exits from the community college. For the purpose of this study, persistence is being considered for the fall to spring only. Persistence is important to community colleges because it is linked to funding from state government. While retention and persistence both are associated with students’ continual enrollment at the same institution until graduation, a focus on

persistence tends to only look at different aspects of the student (Blanchard, 2018). The decision to exit an institution of higher education occurs when the student faces various challenges such as, lack of academic skills, financial struggles, and lack of commitment. These challenges determine how students will navigate through their educational journey. A student's positive and negative experiences will ultimately affect the student's time at the institution. According to Cabrera, Castaneda, Nora, & Hengstler (1992) negative experiences weaken student intentions and commitments, especially commitment to the college, and in turn increasing the student's change of leaving.

Persistence is linked to student attitudes and behaviors to obtain their educational goals (Ericksen, 2022). The topic of persistence has been researched with the focus on factors that affect student persistence. In 1975, Tinto created the integration model that illustrated a student's ability to integrate and feel valued were more likely to persist (Tinto, 1975, Barbatis, 2010). Tinto's Model of Institutional Departure places students into two categories: academic dismissal and voluntary withdrawal (Tinto, 1993; Blanchard, 2018). However, student departures due to academic failure accounts for only 15% to 25% with the remaining 75% to 85% student departure stemming from voluntary withdrawal (Blanchard, 2018). Academic deficits, institutional barriers, and interactions with faculty and support staff have been linked to students' ability to persist, or not, to the next semester (Hall, Worsham, & Reavis, 2021). Institutions of higher education budget millions of dollars to provide incoming students with opportunities to encourage student success (Weihe, 2010). As a support system for underprepared students, community colleges, the implementation of a First Year Experience course can have a strong effect to

students' persistence due to the activity and engagement that occurs in the class (Ericksen, 2022).

The students who are more likely to persist all have similar characteristics. These characteristics are “middle to high socioeconomic status, positive secondary school achievement, and strong family support” (Tinto, 1975, Barbatis, 2010). Further research completed by Astin in 1984 imply that students who participate in campus activities tend to persist at a higher rate (Astin, 1984, Barbatis, 2010).

Community colleges are accountable for the Full-time Enrollment (FTE) which is the driving force to increase student persistence on campus. Involving students and establishing connections to the campus community is part of student persistence (Hunter, 2006). However, community colleges struggle to find a way to attain considerable gains in reducing persistent gaps (Jenkins, Lahr, & Fink, 2022). There are sizeable gaps at among students by race, family income, age, and other variables which can affect student persistence (Jenkins, et al, 2021). Ericksen explains that persistence is the steps a student takes to “continue on in their studies”. Community Colleges are implementing campus programs that help students find a balance between academics and social connections thus improving persistence rates.

Tinto's Theory of Departure

Due to community college's role in educating non-traditional students with lower incomes and who may be underprepared, community colleges must find a way to raise persistence rates (Erikson, 2022). Student enrollment rates at the community college have increased yet graduate rates do not coincide with the increase. Tinto established a model of institutional departure as a theoretical framework that examined the effect

demographic characteristics, family background, high school GPA, ACT composite score, and college academic performance have on persistence (Tinto, 1975, 1993). The study emphasized clarifying dropout behavior from institutions of higher education and that student background and personal goals influence academic performance while finances are the main reason students persist or leave campus (Tinto, 1993). His research indicates that students who were prepared for college-level coursework were more likely to persist (Stewart, Kim, & Lim, 2015). Tinto's original model recognizes that "individuals enter institutions of higher education with an emotional and intellectual baggage that involves their own individual characteristics" which will have an impact on motivation to earn a degree and strengthen their expectations (Nicoletti, 2019).

Tinto's theory of college student departure provides a framework for colleges to implement to aid in increasing student persistence. The theory is based on the premise for students to persist they need integration into formal and informal academic systems along with formal and informal social situation (Tinto, 1995). This refers to student involvement is critical to students' ability to persist (Milem & Burger, 1997). His initial conceptual model from 1975 was redesigned in 1995 to in depth details on the interaction between student behavior and student perception. The new design allows for description on how "students interact and experience the campus environment" and allows for a focus on student behavior (Tinto, 1995, Nicoletti, 2019). The previous experiences and under preparedness of students account as the factor that has the largest impact on persistence at the institution of higher education. The combination of academic and social domains allows for a strengthening of student commitment to persisting and in turn completing the degree program (Nicoletti, 2019).

In 1993, Tinto's research identified three major reasons why students leave campus: academic difficulties, inability to set educational and occupational goals, and failure to connect to the campus (academically and/ or socially). Institutions can implement systems, like the First Year Experience Course, that can provide resources and opportunities to effectively increase persistence. Tinto's model claims that a student will persist or drop out can be predicted by the student's level of academic integration and social integration as shown in Figure 1. In order to fully understand the concepts of Tinto's integration one should use the following measures for academic and social integration (Draper, 2008):

Academic Integration

Grade/ mark performance

Personal development

“Do you think you are doing well academically?”

Enjoying your subject(s)

Enjoying studying your subjects

Identification with academic norms and values

Identification with one's role as a student

Social Integration

How many friends you have.

Personal contact with academics

“Are you enjoying being in college?”

Tinto's research was completed at four-year institutions of higher education. While social integration is part of his theory, one must recognize social experiences at the community college level is different. Students have limited extracurricular activities and social connections are limited to classroom experiences.

Figure 1.

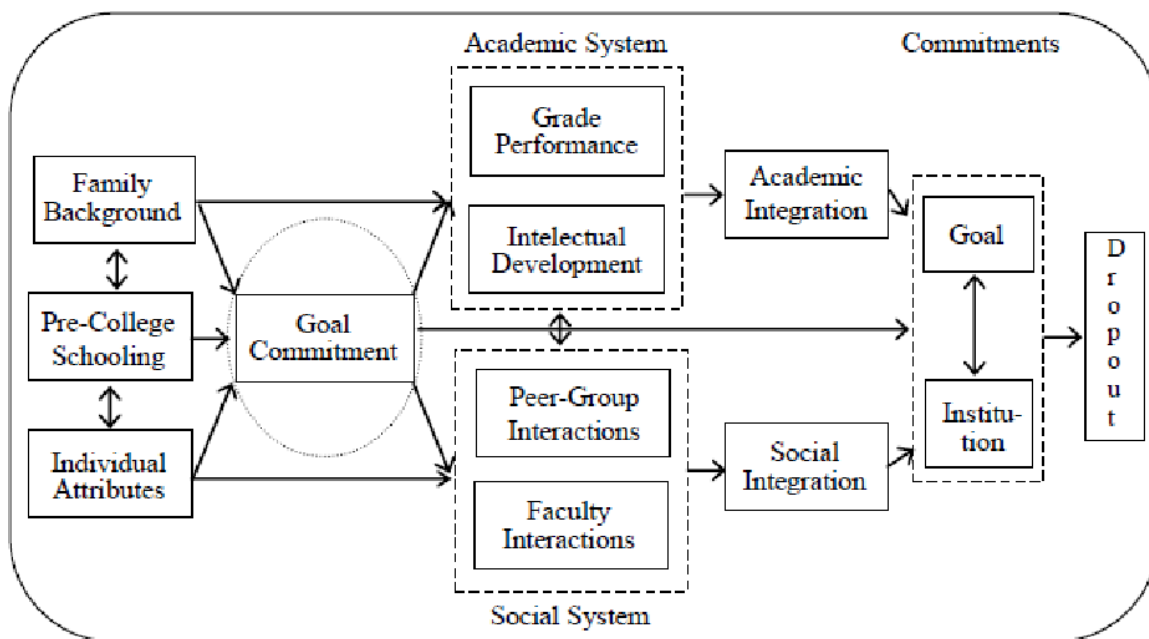


Figure 1. Tinto and Cullen (1973) Goal Commitment model.

While the concepts of academic and social integration can have an effect on persistence, they do not mention the influence of the job market on community college student persistence (Tinto, 1975). In Tinto's 1975 study, he mentions that the job market is only a small part of a student's decision to enroll in community college. There is not an association on student persistence, rather, the job market is indirectly associated to a student's assurance to goal completion (Tinto, 1975; Stuart, et al. 2014). The role

community colleges play a role in workforce development is different than the role of four-year institutions. The completion of a degree program is a smaller importance for community college students in comparison to students at four-year institutions (Grubb, 1993). There is a direct association between student participation in academics and student career attainment (Tinto, 1975). The ability to distinguish between the academic and social aspects of the college suggests that students can participate in one but not the other. Tinto's Theoretical Dropout Model discusses that student experiences affect student decisions to exit or persist at the institution of higher education (Tinto, 1975, 1993; Nicoletti, 2019).

Tinto's Model provides institutions of higher education with a framework to predict a student's potential to dropout. Moving into this decade, modifications to the model can be implemented to determine which students need interventions (Chrysikos et al., 2017). Community colleges can develop a dropout model, similar to Tinto's model, can set parameters around the academic and social integration to pinpoint ways to support students with a higher probability of not persisting (Murray, 2014).

Regina Deil-Amen (2011) expanded Tinto's model to create a conceptual model that classifies persistence of second year community college students. The study mentions that Tinto's theory (1993) did not examine student's institutional experience. Deil-Amen notes that students who persist when they are perceived as knowledgeable and social similarities (Deil-Amen, 2011). A student's ability to integrate academically and socially suggests a higher persistence due to exposure to campus resources. The experience a student has inside and outside the classroom encourages self-efficacy, a

sense of belonging, and ultimately, academic and social success (Deil-Amen, 2011; Blanchard, 2018).

Influences on Student Persistence

Recognizing why students exit college before completing their degree program can provide insight and allow campuses to increase student persistence. The evidence provides administrators in higher education with a clear view of the obstacles in that impact a student's ability to complete a program (Strom & Strom, 2013). The ability to recognize the obstacles hindering students from graduating allows administration to implement processes to remove the barriers (Ericksen, 2022). The administration and faculty at community colleges understand that underprepared students need to have developmental programs that can increase student persistence (Bailey & Alfonso, 2005; Blanchard, 2018).

The largest obstacle obstructing student persistence rates is employment. The research illustrates that 60% of students enrolled in a community college work 20 hours a week and one-third of students work more than 35 hours a week (Strom & Strom, 2013). A student's inability to find a balance between work and academics is why many students exit community college prior to completing their program. Students face challenges that are linked to paying rent, providing food, and paying for college which all impact their progress towards program completion and in turn effecting persistence (Herder, 2021). Students have also mentioned that work and school impact time with family and can also cause a student to leave.

The second largest reason as to why student leave prior to completing their degree program is due to the demands of the courses. Studies show that 34% of students leave

due to the course work being too difficult (Strom & Strom, 2013). Students felt that they were unprepared for the coursework regardless of their obtainment of a high school diploma or certificate. Unprepared students have a higher probability of have low academic self-concepts paired with unreasonable grade and career expectations, and lack intrinsic motivation (Ender & Wilkie, 2000). When students lack the study, organizational, and time management skills they tend to struggle in academics. It is essential that students recognize the tools provided to them and how they relate to the learning process (Ericksen, 2022). The tools provided to the student should positively affect their learning.

The third reason behind student exits is related to funding. Financial aid plays a large role in decreases in persistence. Students who are financially responsible for their tuition tend to drop out at a higher rate than their peers who receive support from others (Strom & Strom, 2013). Financial stressors impact a student's ability to remain in college. Herder (2021) states that "the more students have to work the less likely they are to persist". A study completed by Saint John, Cabrera, Nora, and Asker (2000) suggests that student aid, tuition, and living expenses account for roughly half of the discrepancy in student persistence. While Merriam, Caffarella, and Baumgartner (2012) mention that limited financial resources are cited more often for withdrawing from higher education. In Tinto's research it is noted that finances impact student attrition (Tinto, 1993). Student finances influence whether or not a student makes the decision to attend college and whether or not they persist towards degree completion.

Lastly, the fourth largest reason why students drop out of college is due to an inability to make a career choice (Strom & Strom, 2013). This stems from a lack of

support in high school with first generation college students struggling the most. First-generation students lack the support at home to help make positive decisions about career, college, and academics (Strom & Strom, 2013). Studies suggest a difference in college expectations between First-generation college students and non-first-generation students (Blanchard, 2018). These students tend to have lower self-efficacy paired with higher negative outcome expectations (Gibbons & Borders, 2010). There are students that enter college with a distinct career goal and others that do not. Regardless, all students need support to make the transition from college to the career field (Teague, 2016).

Beyond the struggles and obstacles of the community college student, community college administration has a priority to examine the research and how it illustrates an increase of withdrawing from online courses. Students in a face-to-face course are less likely to withdraw than from an online course taught by the same instructor (Armstrong, Tudor, & Hughes, 2021). It is important to understand that limitations due to the differences of why a student will choose an online course over a face-to-face course. When you meet a student where they are according to Tim Loatman, you are able to help the student to be successful. In his interview with Ericksen, he mentions that students tend to not have strategies to deal with their academic challenges ahead of time and that students only focus on the challenges when faced with a situation (Ericksen, 2022).

Noel-Levitz takes the concept of students dropping classes and leaving campus further by defining sub-populations of students. Students who do not return to campus or persist toward graduation are divided into the following sub-populations: dropouts, stop-outs, opt-outs, and transfer-outs (Noel-Levitz, 2008). There are specific features for each category. When meeting the needs of students to help retain students it is important to

recognize students and which category they fit into and how to implement strategies that will increase persistence (Noel-Levitz, 2008).

Recognizing why students exit college before completing their degree program provides insight and allows campuses to increase student persistence. The evidence provides administrators in higher education with a clear view of the obstacles that impact a student's ability to complete a program (Strom & Strom, 2013). Community colleges have to recognize the obstacles hindering students from graduating and implement systems to minimize the barriers.

The Role of Faculty on Student Persistence

Research indicates that student-faculty interactions are associated with student persistence (Umbach and Wawrzynski, 2005). The biggest error faculty can make is to focus on a student's effort as to why a student is unsuccessful. The reality is that student success includes a partnership between the campus (including faculty) and the student (Cuseo & Farnum, 2011). This relationship must be built upon shared power and a common goal. The reciprocity is between what "faculty can do for students and what students can do for themselves" (Cuseo & Farnum, 2011). Institutions of higher education with increased persistence have distinct communication with students and allow them to have input on decision making that have direct impact on students. Students come to campus with a long list of expectations. A transition that is not smooth plays into low persistence rates (Hassel & Ridout, 2018). Faculty are the link between student success and persistence.

Another error that faculty have is to place the blame on the student. When faculty's mindset is that students are ready to pursue a higher level of academics, then

both faculty and student gain. (Matthews, 2018). The reality is student success is a partnership between the student and the institution. Or the student and the faculty. Faculty who accrues higher rates of success are ones that recognize students are partners in learning and teaching (Matthews, 2018). It is necessary for faculty to take student insights into consideration. Students can provide perceptions on learning outcomes, instructional strategies, and other ideas. The acknowledgement of a student-faculty partnership removes the stigma that students are not successful due to a lack of effort. The partnership illustrates that both parties are focused on meeting the best needs of the students. Faculty are on the front line fighting for student persistence even when they are not fully aware of their role. Administrators at institutions of higher education must communicate the how and why student success is important for the institution. Faculty that can make the connection to what happens in the classroom to student persistence and achievement make a difference on campus (Cuseo & Farnum, 2011).

Regardless of what steps an institution makes in terms of student success the reality is that the classroom success is essential to everyone (Strikwerda, 2019). It is necessary for campus administrators to acknowledge the role of instructors, especially in the first year, have on students. Umbach and Wawrzynski (2015) found that reciprocal relationships between faculty and students based on respect and challenging experiences had higher levels of student persistence. Equally, student experiences that are centered on classroom involvement, faculty-student interaction, and intellectual growth through active participation are associated to student commitment (Strauss & Volkwein, 2004). Connections with faculty and at-risk students made during the first semester allow for students to gain skills to help them succeed. These connections can be made in first-year

experience courses and program introductory courses. When an institution of higher education takes the time to incorporate first-year experience courses the institutions shows that they are committed to providing students with skills needed to be successful. First-year experience courses can offer students extra tutoring, office hours, study skills, and time management skills; all of which can improve student achievement (Strikwerda, 2019).

Institutions focused on increasing graduation and persistence rates can do so by allowing faculty to focus on classroom connections and academics. Kuh (2004) discusses the positive influence that student and faculty interactions (inside and outside the classroom) on student persistence. Faculty who set clear expectations and converses about class assignments and research have students who are more likely to persist (Kuh, 2004). When faculty can connect with students in the classroom, they are capable of aiding and guiding students as needed. Classroom connections begin when faculty can show students that they care. Intentional and purposeful interactions with faculty positively influences persistence (Pascarella & Terezini, 2005). This is done by using students' names, providing attention as needed, responding quickly to messages. The blog titled "Student Retention and Persistence: How Faculty Can Embrace a More Active Role" mentions that Faculty members who have a pedagogical approach that allows them to be in tune with students leads to appreciation and reciprocal relationships. Relationships built upon a shared goal will encourage student success. Evidence supports that students who engage in the classroom are more likely to engage outside of the classroom (Lancaster & Lundberg, 2019). Recent studies revolving around student

success point to community college student engaging with faculty as a predictor of student success more than student peer engagement (Lancaster & Lundberg, 2019).

Faculty have a large role in student success and persistence because they serve as instructors, mentors, and guides (Mostowy, 2020). Faculty provide students with the ability to succeed, fail, and to obtain employment in the future. In other words, the role of faculty is guiding students down the path towards being a contributing member of society. The first step in understanding the role faculty plays in student success is to recognize that good teaching is a skill that must be tuned and modified with each new group of students. Faculty must strive to meet the needs of all students that enter the academic environment.

Institutions of higher education with a focus on student success cannot forget about adjunct instructors. The adjuncts are useful to institutions since they typically teach first-year or introductory courses (Strikwerda, 2019). Many adjuncts excel at working with at-risk students and can communicate insights with full-time faculty. However, more training and support on student persistence needs to be implemented for adjunct faculty. This is due to the importance of sharing the “whys and how’s” of student success with all of those that have direct impact on students.

Pandemic’s Impact on Student Persistence

A study of current student persistence cannot overlook the impact that the pandemic has had on enrollment, persistence, and persistence at the community college level. The National Student Clearinghouse Research Center reported that there was an overall drop in enrollment, with the largest drop with first-time students (Lederman, 2021). An examination of census data completed by the Community College Research

Center in all of 2020 discovered that “40% of households that included members with community college plans were cancelling their plans” (CCRC, 2020). This number was more than double the rate of students planning to attend a four-year institution.

Community colleges across the country and more specifically, in the state of Tennessee were seeing a drop in student enrollment starting the fall of 2020 (CCRC, 2020, Lee, 2021). It is important to note that “overall persistence improved as first-time students declined sharply” (National Student Clearinghouse Research Center, 2022).

While new enrollment is only one part of the drop, institutions shifted to ensure that current students persisted while recruiting new (Lederman, 2021). It is evident that the pandemic has played a role in dropping enrollment numbers. The decline in enrollment is difficult for community college leaders because of the steady increase in enrollment over the past years (National Student Clearinghouse, 2021).

The pandemic increased the number of at-risk students due to unprecedented times and uncertain state of the academic system. Community colleges are dealing with the inequities that surfaced during the pandemic (Lee, 2021). It is known that community colleges serve a differing demographic than four-year institutions and there is a distinct disproportion effect on community college campuses (Lederman, 2021).

The pandemic has highlighted the impact on teaching and learning activities at the higher education and the effect on student achievement (Schleicher, 2020). The quality of learning decreased due to a lack of typical learning experiences such as hands-on activities, lab, and practicum opportunities (Hasan & Bao, 2020). Students from lower socio-economic households were the most effected due to limitations of lockdown and limited learning activities (Casanova, Gomes, Moreira, & Almeida, 2022).

Faculty were charged with finding new ways to connect with students in a virtual world (Coley, 2021). Yet, the autonomy levels of students were at risk, and it became necessary for faculty to establish systems that incorporated connecting with students and allowing students to connect with students in the virtual classroom (Casanova, Gomes, Moreira, & Almeida, 2022). Faculty needed to be aware of signs that students were struggling or at-risk of dropping out. The ability to respond to students with concern and care was harder due to the transition to virtual classrooms (Coley, 2021).

While persistence rates seem to remain steady during the pandemic, there has been some research focusing on students leaving and the resources provided. Elisabeth Lackner (2023) completed a study that examined community college student persistence at a community college in New York City during the pandemic that began in 2020. Community college students are more disadvantaged than students who attend four-year institutions. The support resources at community college are limited in comparison to universities. (Kahlenberg, 2015; Strombos et al. 2018). Since community colleges are open access, the funding tends to be lacking in comparison to other institutions that are more selective (Lackner, 2023). The limited funding can be seen in a lack of coordinated efforts between academic and support departments and high caseload of academic advisors (Lackner, 2023; Strombos et al., 2018). Lackner's study suggests that there were several inequities that strengthened during the pandemic. The findings of this study pointed to higher withdrawal rates for new students, men, minority students, and part-time students (Lackner, 2023).

Student Demographics Effect on Persistence

Institutions of higher education, especially community colleges, serve underprepared and underrepresented population must address the challenges that transition to college has on these students (Stewart, Lim, & Kim, 2015). The result of research studies illustrates students' social and economic standing are associated to student transition to college and ultimately impacting persistence (Raab & Adam, 2005). There are varying results on the effects of demographics on persistence. For example, Corbett, Hill, and Rose (2008) divulged that women tend to persist and graduate at higher rates than males. While a study completed in 2005 illustrate that female rates were close to 20% higher than male students (Hagedorn, 2005).

There have also been differing results on the effect of race on persistence (Stewart, Lim, & Kim, 2015). There have been studies reporting that Black students have lower persistence rates than White students (Hagedorn, 2005). In contrast, national samples of students at four-year institutions have shown higher persistence for Black students (Stewart, Lim, & Kim, 2015).

Gender

There is a definite gender gap within higher education. For example, in 1947 male students made up 71% of students in higher education (Watermark Blog, 2022). The percentage dropped to only 43% of male students in higher education in 2010 (Conger & Long, 2010). There has been an implication, through various research, that female students persist more than male students (Juszkiewicz, 2020). In a study complete by Corbett, Hill, and Rose (2008) it was illustrated that women students attend college and graduate at a greater number than male students. This also illustrates that program

completion rates tend to be higher for females than males. The National Clearinghouse published data provided by the U.S. Department of Education that women also persist at a higher rate than men (National Student Clearinghouse, . Prior research points to female advantages in college enrollment linked to higher high school GPAs than males (Conger & Long, 2010) which make them more likely to persist. The difference is that male students tend to have lower high school grades upon entry to college and enrolled in more difficult courses than female students (Conger & Long, 2010). Other research illustrate that females are more inclined to ask for help and are more self-disciplined (Riegle-Crumb 2007).

Other theories suggest that student's performance is determined by costs and incentives which are different for males and females (Conger, 2009). For example, males are less likely to enroll in college but of the males that do they have higher aptitude test scores than females (LoGerfo, Nichols & Chaplin, 2006). However, females are less like to major in programs with stricter standards (Jacobs, 1999). Yet, there are other studies (Peter and Horn, 2005; Riegle-Crumb, 2007) that suggest that female students have an advantage over their male counterparts in "non-academic areas: parental, peer, and teacher expectations; as well as non-cognitive skills such as organization, self-discipline attentiveness, dependability, and seeking helps from others" Conger and Long, 2010). These varying results may be linked to numerous variables it is necessary to focus solely on male and female students who are currently enrolled to provide some clarity to the persistence data.

Age

Age can be a way to segregate learning on college campuses due to the campus population being mainly students ranging in age from late teens to early 20s (Moen & Schafers, 2021). However, institutions of higher education are taking a new lens and integrating age. In recent years, more adult learners are enrolling in college and want to learn (Moen & Schafers, 2021). The age of the student can have a role in student persistence due to differing responsibilities. The variable of age captures a significant portion of the student population. Age can be considered an indicator of persistence. However, research points to the age at which a student enters college. The National Student Clearinghouse reports that the 2019 cohort has the higher persistence with students aged 20 or younger.

The ability to divide student populations by age provides community colleges with a context in which to examine the differences between student backgrounds (Adelman, 2005). Students have varying commitments (family and job commitments) based on their age category which in turn have could cause an effect on academic and social behavior. Students who are considered non-traditional report having a lower satisfying academic experience (Blanchard, 2018). These students find classroom experiences less pleasurable due to less challenging learning materials.

A Spotlight article, compiled of data from the National Center for Education Statistics (NCES) longitudinal study (2015), suggests that students attending a four-year institution at the age of 19 or younger had a higher persistence rate than students who were 20 to 23 years old (53%), 24 to 29 years old (48%), and 30 years old or over (57%).

This study examined student employment, marital status, income, and debt. Students aged 19 years old or younger made up 85% of first-time students.

Race

The population of students at the community college level is a diverse population. However, there is a gap in persistence by race (National Student Clearinghouse, 2021). For example, in the 2019 cohort there is a large gap between White (79.3%) students and Black (64.9%) students. National Student Clearinghouse also reported that “most students who persisted regardless of race . Historically, there has been a gap between minority groups which is why a strong focus to increase persist among these groups in necessary (Brock & Slater, 2021).

Research studies suggest that racial/ethnic minority students are graduating a significantly lower rate than their non-minority counterparts (Quaye, 2009). These lower rates have caused institutions of higher education to put resources into finding ways to increase minority student success rates (Braxton, 2000; Tinto, 1987, 1993). It is mentioned that institutions of higher education move away from the existing culturally biased frameworks for student departure and find new ways of examining persistence; focusing on the diverse student populations (Quaye, 2009; Kuh & Love, 2000).

Student Success

Student success is a term that is often misconstrued due to the lack of a consistent definition. Educators within higher education must first establish a working definition to implement successful student success initiatives on campus. The establishment of a consistent definition of the term “student success” one must be able to determine the evolution of the concept.

The definition of student success (established by Jillian Kinzie) is:

“Increasing the numbers of students from different backgrounds proportionate to their age cohort consistent with national goals for postsecondary attainment who participate in higher-quality educational programs and practices culminating in high-quality credentials and proficiencies that enable them to be economically self-sufficient and civically responsible post college.”

However, it is equally important to recognize that student success is a partnership between the student and the institution. This partnership is the driving force to how student success initiatives are to be implemented and achieved. Educators within higher education recognize that student success includes students as partners in learning and teaching (Matthews, 2018). Student insights are to be taken into consideration when implementing initiatives or creating new policies. It is important to work with students if the goal is to promote, expand, and further develop student success reform (Matthew, 2018). This goal of the partnership is to remove the idea that institutions are why students are successful and students' lack of effort is the reason behind unsuccessful students. A partnership illustrates that both entities are focused on making the most of their time on campus.

The Community College Survey of Student Engagement focuses on the dissemination of information to students to ensure that the correct information allows for student preparedness. The foundation to student success is students having the information to make the choices for their best interest (CCSSE, 2017). When institutions of higher education take the time to provide students with resources, skills, and mentors

to be success then persistence odds improve. Students want to feel that the community college can support them and helping to meet their needs (Matthew, 2018).

Beyond partnership with students, the American Federation of Teachers (AFT) refers to student success “as the achievement of the student’s own education goals. Educators within higher education understand that students are not only pursuing a degree or credential but are on a specific career-path (AFT, 2011). Academic instruction should provide students with career skills that will help students find a job within their desired field.

Another author discusses the development of a student success definition that focuses on specific outcomes the student must develop while in college (Parnell, 2018). It is evident that many institutions of higher education are using the term “student success”. However, when looking to help students thrive on campus many fail to have a consistent definition of student success. Parnell state the importance of modifying the definition to incorporate the preparation of students. The preparation of students to be knowledgeable, adaptable, resourceful, and self-aware are key components of student success.

Parnell also examines the challenges that students face. These include personal and social challenges that encompass a student’s college years and beyond. It is necessary for institutions of higher education to provide guidance and development in a meaningful way if the focus is placed upon a student’s ability to adapt to the environment, understand their needs and the needs of others, manage resources, and understand their contributions to the community. The outcomes of student success are best when developed in a context of holistic development.

Student Success Initiatives

Campus initiatives that are proven to increase persistence rates are initiatives concentrating on first-year experiences (including orientation), clear learning pathways for students, high impact practices, and experiential learning activities. Student success initiatives vary from campus to campus, and it is important for initiatives to meet the needs specific to the campus demographics (Hunter, 2021). The data from previous research suggests that academic intervention programs such as: orientation, tutoring, advising, counseling, and First-Year Experience Courses provide students with the support necessary to overcome deficiencies (Pascarella & Terenzini, 2005). Other research (Braley & Ogden, 1997 and Weissman, Silke, & Bulakowski, 1997) illustrate that similar intervention programs at institutions of higher education are “short-term benefits by increasing academic performance for under prepared students in the first year in college” (Stewart, Lim, Kim, 2015). The ability to help students gain skills for academic performance can have an effect on student persistence. Stewart, Kim, and Lim (2015) discuss the benefits of increasing student performance on long-term retention the range from two to six years. The community college in Middle Tennessee has a plan of action was developed to help prepare students for their academic careers by incorporating student habits, time management, class preparation, and development of critical thinking skills (Marina & McGuire, 2008).

Helping students transition from high school to college and provide them the opportunity to be successful is a challenging task. The community college’s focus on implementing a First Year Experience programs is paired with the institutions current and

existing processes yet recognized the importance of helping students develop a solid foundation.

Orientation is a large part of a student's introduction to the campus. The orientation is designed to provide intentional experiences for the student as part of the First Year Experience. Studies have pointed to the importance of orientation and how it positively effects persistence, retention, program completion, along with academic success (Cueso, 1997). Recently, orientations consisted of an ability for the student to collaborate faculty and student affairs (Strumpf & Wawrynski, 2000). Due to trends in technology and the recent pandemic, administrators were able to modify delivery methods and find a balance between technology and human connections (Mullendore & Banahan, 2005). And due to an increase in the number of non-traditional students more flexible orientation experiences have been added. Orientation leaders also understand the importance of involving the family in the orientation process.

Academic advising as part of the First Year Experience must include one-on-one advising opportunities. This allows for the student to develop an advising relationship at the start of the new year. In his research, Terry O'Banion suggests providing five major parts to the student/ advisor relationship. These include exploration of life goals, career goals, program/ major, course choices, and finally scheduling (O'Banion, 1994). It is important for advisors to have discussions with the student to help them determine if the student belongs in the program and what does the student want their college experience to look. This is a topic that can be revisited with each student/ advisor interaction.

Since many students that arrive on campus are first generation students intrusive advising allows for students to connect with people who have successfully completed

college (Herget, 2017). This type of advising removes the obstacles that can hinder students and works well with first-generation students since it allows for faculty and staff to become in tune with the student. When faculty and staff are in tune with students they can quickly determine if a student is struggling with campus or personal issues. And this is helpful due to the dynamic of the first-generation student, not having a person at home to provide the necessary guidance (Herget, 2017).

In 2012, Strayhorn discussed the importance a sense of belonging and defined it as:

“students’ perceived social support on campus, a feeling or sensation of connectedness, and the experience of mattering or feeling cared about, accepted, respected, valued by and important to the campus community or others on campus such as faculty, staff, and peers.”

Further research illustrates that a sense of community and interactions with the campus community effects a student’s willingness to persist (Berger, 1997). There is an association between positive outcomes and student belonging in education. A sense of belonging positively effects achievement, retention, and persistence (Hausmann, Schofield, & Woods, 2007). Frequent interactions with peers, faculty and staff creates relationships built on support and these experiences enhance a student’s campus experience.

First-Year Experience Course

The last part of the First Year Experience model or student success system is the course, which was designed to provide students with much needed academic support to help students to be successful in the classroom and beyond. The research illustrates that

student participation in a First Year Experience course had a positive effect on persistence (Cho & Karp, 2013). Cho and Karp (2013) found that students who are not enrolled in First Year Experience courses were less likely to persist. The course provided students with career exploration, development, and readiness. Suvedi and Millenbah (2016) discussed that need for undergraduates to be ready for careers after graduation and develop skills that employers are expect. Community colleges have a duty to support all students and have to recognize that some students are well-prepared and focused while others are underprepared and unfocused (Suvedi & Millenbah, 2016). Teague (2016) summarizes this in his research, “some students enter college with clear career goals. However, these students need support to make the college transition and successfully move toward their educational goals”.

The First-Year Experience model varies from institution but is typically offered during the first semester (Khang et al., 2018). The purpose of the course model is to meet the needs of the diverse population while recognizing the need to connect with students at the start of their academic year (Cho & Karp, 2013). Stebleton and Diamond (2018) posed the questioned:

“How often and how are we creating opportunities for new students to engage in self-reflection and exploration around career-life issues? What can higher education professionals do to create and foster greater opportunities for students around career exploration and self-exploration? One suggestion is to recognize that intentional reflection focused on career-life planning, vocation, and exploration can potentially serve as a high-impact educational practice, especially for first-year students” (Stebleton & Diamond, 2018).

The goal of implementing a First-Year Experience course is to increase student persistence and retention percentages. Increasing student completion rates is linked to student persistence rates (Mayo, 2013). An organized First-Year Experience course paired with other student success initiatives is a positive strategy to improve student learning and helping students navigate the challenges student face at the community college (Khang at al., 2018). The final outcome is helping students develop strong time-management and study skills along with other strategies to promote academic success (Suvedi & Millenbah, 2016).

Various components are noted in the First-Year experience course throughout numerous community colleges. The commonly noted pieces from the course provide students with opportunities for:

“Student-to-student interactions and activities, faculty-to student interactions, and student involvement on campus, link curriculum and co-curriculum, academic expectations, engagement, and academic preparation”. (Mayo, 2013).

Providing students with opportunities to not only develop stronger academic skills but opportunities to explore career concepts is an effective way to assist first year students (Lepre, 2007). The curriculum of strong First-Year Experience courses with a variety of career elements that can improve the chances of reaching students who are still uncertain of their career path. The ability to reach the undecided student and provide support interventions can possibly remove the risk of academic failure (Lepre, 2007). Career readiness is important for community colleges and the push for workforce development. Future employers and other stakeholders are constantly searching for graduates with characteristics such as adaptability, communication, and the ability to

solve complex problems (Suvedi & Millenbah, 2016). Community colleges must prepare students with the qualities needed to obtain employment in their career after graduation.

Successful First-Year Experience Courses provide students with instruction focused on an understanding of the college experience is best when balance is established (Windham et al., 2014). Courses that provide strategies that improve study skills are useful to all students, not solely the underprepared students. Trends illustrate that students have positive gains when participating in First-Year Experience Course (Barefoot, 2000). However, these courses do not solely focus on study, organizational, and time management skills but also include opportunities to develop relationships with peers, faculty, and the campus (Windham et al., 2014).

The First-Year Experience course allows for students to develop self-efficacy skills. The course also provides a platform for students to believe in their abilities and see the impact of their individual efforts. When students have a high level of self-efficacy, they realize the control they have over their personal academic success (Cuseo, 1997). The classroom is developed in such a way to include integration factors. Tinto presents the three interaction factors linked to student success as peer group, faculty, and staff (Windham et al, 2014; Tinto, 1975). Since the classroom environment is established by faculty then it is important to understand committed faculty are linked to successful First-Year Experience Initiatives. This is especially true to First-Year Experience courses.

The end goal is for students to feel connected to the campus and who are willing to put for the work to be successful (Barefoot, 2000). Research also highlights that students involved in a structured First-Year Experience Course report a higher level of satisfaction and involvement on campus and in turn achieve higher grades and tend to

persist at a higher level than students not enrolled in the First-Year Experience Course (Jamelske, 2009). The development of a First-Year Experience Course provides students with a solid foundation in the first semester on campus.

Holistic Approach to the First Year Experience

The implementation of a First-Year Experience course can be beneficial to student success on the community college campus when it encompasses student learning communities, focuses on study skills within the context of student support. Students who have participated in a First-Year Experience course agree that the course provided access to campus resources. Beyond the resources students found necessary academic support while transitioning to the campus community (Acevedo-Gil & Zerquera, 2016). Faculty can be a reliable connection to students in the First-Year Experience course. Students can share their experiences, trials, and triumphs with a designated support person. In turn, faculty can help students stay on track toward their personal goals. This can reduce self-doubt and develop a strong sense of self (Acevedo-Gil & Zerquera, 2016).

Students arrive on campus lacking in coping strategies necessary to navigate both learning and social environments on the community college campus (Cuseo, 2011). The outcomes of a First-Year Experience course provide students the opportunity to gain support for academic performance, social development (U.S.DOE, 2016). In order for student success initiatives to have an impact, especially First-Year Experience courses, it is important to recognize that student persistence and persistence is not solely linked to factors based on academics. Some students who leave college are in good academic standing which illustrates a need to provide holistic support (Cuseo, 2011).

Holistic support is visible within the course that goes beyond the goal of developing academic and intellectual competence. The course also supports students through the establishment and maintaining interpersonal relationships, understanding autonomy, and career planning (Cuseo, 2011) Cross-campus contributions to the First-Year Experiences course impact the student engagement and connection to the institution. The ability to collaborate with student affairs supports the holistic development of the student and persistence rates (Cuseo, 2011).

High Impact Practices

High Impact Practices are well-designed, long-term experiences that encourage students to foster student access while attending a college (Tandet, 2022). Learning communities, along with First-Year Experiences courses, are considered a high-impact practices which the Tennessee Board of Regents defines as a “pedagogical approach which requires an investment of time and energy over an extended period that has usually positive effects on student engagement in educationally purposeful behavior.” The implementation of a First-Year Experiences course is considered a high impact practice because it creates a learning environment that sets high expectations for students, creates opportunities for interaction between faculty and students, recognizes the diverse needs of the students, provides frequent feedback paired with reflection, real-world applications, and demonstrated competence (TBR, 2022). Other studies, completed by Kuh, Kinzie, Brownell and Swaner, have found that high impact practices are associated with persistence and GPA, deep approaches to learning, higher rates of student-faculty interaction, increases in critical thinking and writing skills, and greater appreciation for diversity (Tandet, 2022; Kuh, 2008; Kinzie, 2012; Brownell & Swaner, 2010).

The Center for Community College Student Engagement (CCCSE, 2014) has defined thirteen high impact practices and structured group learning experiences that impact student persistence and success. Orientation as a single or extended event can assist students with become familiar with campus resources, policies, and organizations. The orientation process aides in establishing a network of support while creating academic and career goals. The First- year experience, another high-impact practice shared by the Center for Community College Student Engagement can be paired with the orientation process that combines classroom and other activities within the first semester (or year). What High Impact Practices are not is one-time experience that encourages students to meet a new friend while participating in an icebreaker (Tandet, 2022). High-Impact Practices are long-term experiences that are well developed that encourage students to participate at the institution (Kuh, 2008). The student can also participate in a student success course established to help students develop study, time management, and test-taking skills. These three high impact practices encourage the student to develop to their fullest potential while increasing student persistence rates (Kuh, 2008). There are other group learning experiences recognized by the Center for Community College Student Engagement; tutoring, supplemental instruction, fast-track developmental education, experiential learning, academic goal setting, and learning communities.

It is suggested, by Kuh, that institutions of higher education make it possible for students to participate in two high-impact practices during their undergraduate program (one during the first year and one further into their academic program) tend to be more successful (Kuh, 2008). These long-term experiences, when designed with students in mind, can support students to persist during their time at the institution. The

implementation of all high impact initiatives provides opportunity for increased student persistence. The data collected by the Tennessee Board of Regents shows that graduates are “globally aware, solution-oriented, and workforce-ready” (www.tbr.edu). It is evident that high impact practices, including First-Year Experience courses, are central to the success of the college, the individual, and society. The purpose of higher education is to graduate students that well-round citizens with a sense of responsibility to society. The First-Year Experience course and high impact practices allows the student to recognize the importance of completing their program of study and the impact they will have on society (www.tbr.edu).

Ultimately, High-Impact Practices, such as a First-Year Experience course, are positive ways to increase persist at the community college. These practices are to be intentional practices that are developed with solid planning (Tandet, 2022). Careful planning has to take place for High-Impact Practices to be beneficial for students. Successful high-impact strategies revolve around interactions, collaborations, connections, and feedback. When working in close proximity with students it allows for the development of skills necessary for students to persist (Kuh, 2008; Tandet, 2022).

Richard F. Vaz (2019) quote summarizes the importance of implementing High-impact Practices at colleges and universities:

“High-impact practices can help students develop skills that are essential in the workplace and that transfer to a wide range of settings—such as communication, problem solving, and critical thinking. In addition, the can give an institution a distinctive and competitive edge at a time when many colleges and universities are struggling to maintain enrollments.”

Institutions of higher education, especially community colleges, can benefit from High-impact practices that push students and faculty to work to solve real problems allows for the development of goal setting, collecting, and analyzing data, and develop solutions. Students will in turn gain skills that will push them to persist while encouraging lifelong skill development (Vaz, 2019; Tandet, 2022).

Community Colleges and Students

Community colleges defined by Homeland Security as two-year institutions that provide postsecondary education at an affordable rate as a route to a four-year degree (studyinthestates.dhs.gov). According to Goldrick-Rab (2010), community colleges have a strong role in higher education serving more than half of undergraduate students in the United States of America. The role of community colleges in American higher education is one that, in 2019, enrolled 5.4 million students (Armstrong, Tudor, and Hughes, 2021). The increasing ethnic diversity is contributing to the need for community colleges to focus on enhancing student development while gearing toward student success. However, data is showing a decrease in student persistence. Regardless, community colleges have a role to play in higher education due to the variety of fields of study offered and the preparation provided to students (CCRC, 2021). The Community College Review Center's policy fact sheet states "Community colleges not only prepare students to take on roles in various employment sectors, but community colleges also prepare students to transfer to four-year institutions of higher education" (page 1, CCRC, 2021).

Students enrolled at a community college tend to be described as "non-traditional". This is due to most students attending community college meet one of more criteria (delayed enrollment, part-time student, financial independence, one or more

children, single parent, work full-time) to be labeled non-traditional (Roman, 2007). It is evident that community college students differ from traditional college students, who have more time to commit to school (Roman, 2007).

Volunteer State Community College is a two-year college with a primary campus located in Gallatin, Tennessee. The satellite campuses are in Cookeville, Livingston, and Springfield, Tennessee. The college was established through a joint effort of leaders and citizens of Sumner County and began offering courses in 1971 with 581 students. Over the years the college has seen growth in enrollment, academic programs, staff, facilities, and quality over the last fifty years. (www.volstate.edu/about-us)

Volunteer State Community College student population of roughly 6636 (full-time students) for the 2021-2022 academic year was broken down by gender with a higher female (63.2%) population than male (36.8%). The campus ethnic diversity was minimally diverse with 8% of students being Hispanic/ Latino, 0.3% American Indian or Alaska Native, 1.4% Asian, 8.8% Black or African American, 0.1% Native Hawaiian or Other Pacific Islander, and 74.2% being White/ Caucasian. Of the student population in the 2021-2022 academic year, 32.3% of students were Federal Pell Grant Recipients.

Volunteer State Community College persistence, retention, and graduation rates are shared on an electronic FACTBOOK. The data illustrates an increase in Fall to Spring Persistence from 63.1% in the 2020-2021 academic year to 69.2% for the 2021-2022 academic year. However, the Fall-to-Fall Persistence rates dropped from 44% (2019-2020) to 40.6% in 2020-2021 academic year. The three-year graduation rate for the 2018 cohort group is 23.4%. The data illustrates a need to implement initiatives that support student success at Volunteer State Community College.

Tennessee Promise

The implementation of the Tennessee Promise created a context in which student success initiatives and student persistence were necessary at community colleges in the State of Tennessee because the program has enrolled close to 108,00 students since the start of the program in 2015 (tn.gov/tnpromise). The Tennessee Promise is a last-dollar scholarship and mentoring program that provides Tennessee High School graduates an opportunity to enroll at a community college or technical college free of tuition. The Tennessee Promise evolved from the Governor's mission to increase the number of Tennessean with a postsecondary credential. The scholarship program allows for students who typically would not enroll in higher education the opportunity to earn a degree. The chart below illustrates the breakdown of students taking advantage of the program.

Table 1.

Students Enrolled at Community College Using the TN Promise

	Cohort		
	Cohort 1 2015-2016	Cohort 2 2016-2017	Cohort 3 2017-2019
% Male	47.70%	46.80%	46.70%
% Female	77%	72.90%	71.80%
Average ACT Score	18.8	19.1	19.3%
First Generation	45.60%	42.40%	40.6%
Median Family Income	\$55,710	\$54,327	\$53,521

*Retrieved from the Tennessee Promise at
tn.gov*

In 2015, the first year of the program, community colleges across the state saw a 10.1% increase in full time enrollment. However, Volunteer State Community College saw an increase of 54.8% in full time enrollment. As the program developed, data for

persistence rates was collected and evidence collected illustrates that students who enroll in a community college or technical program as part of the Tennessee Promise program only 61.8 percent will complete a program (tn.gov/tnpromise). There is evidence that COVID-19 impacted application, enrollment, and retention within Tennessee Promise students. (tn.gov/tnpromise). The program temporarily modified rules for earning or maintaining Promise eligibility. The scholarship program is linked to increased enrollment rates at community colleges across the state. The Tennessee Promise released data for the upcoming 2023-2024 academic year as having the largest application class to date with 64,612 applicants (TNPromise.gov).

Chapter Summary

Community colleges across the United States play a large role in higher education. This literature review explored the various ways that institutions of higher education, especially community colleges, have implemented initiatives that support student success and student persistence. While the research highlights other aspects of the First-Year Experience initiatives (orientations, advising, etc.) the development of the First-Year Experience Course is one example of how to increase persistence amongst community college students. The information gained from the examination of the effect of the First-Year Experience course on student persistence can allow for higher education administrators and state legislature to develop policies that support persistence at the community college.

CHAPTER III.

METHODOLOGY

Introduction

This study examined the impact the First-Year Experience Course on student persistence at Volunteer State Community College. This chapter discusses process implemented to examine the relationship between the completion of the First-Year Experience Course, independent variable on Student persistence at Volunteer State Community College, dependent variable.

Subjects

This research study focused on students in a community college environment that have completed the First Year Experience Course. The researcher formally requested access to institutional data from Volunteer State community college in Gallatin, Tennessee. The evidence collected in the form of data was analyzed through the IBM Statistical Package for Social Sciences (SPSS) software. The study looked at students who completed the course starting in Fall of 2020 through Fall of 2021. A total of 4113 students were identified to meet the requirements for analysis.

The protocol for requesting data started with the investigator's submission of Middle Tennessee State University's Institutional Review Board (IRB). Upon approval, a request for an Institutional Review Board application request was submitted at Volunteer State Community College. Since the study is not using identifiable personal student information there was no need to obtain consent, disclosure, or confidentiality due to the study.

Research Design

The proposed quantitative study was completed in a retrospective, non-experimental design within the context of a predictive research objective and investigated the effect of the First-Year Experience course on student persistence at the community college. Retrospective research, as discussed by Johnson and Christensen, starts with a dependent variable, and utilizes data previously collected to determine the change the independent variable has on the dependent (Johnson & Christensen, 2020). The outcome was explained or support the current effect, if any, on the dependent variable. However, it is necessary to recognize the limitations stemming from the examining data that cannot be manipulated and the possible impact on the results of the proposed study.

The framework of a non-experimental design provided the researcher the ability to concentrate on the hypothesis. This is because the researcher does not have control over the independent variables. The researcher simply reviews data collected in the past and re-examines the data to determine if they support the hypothesis (Johnson & Christensen, 2020). Additionally, a non-experimental design the assignment of random groups is absent from the study (Johnson & Christensen, 2020). The usage of a non-experimental design study in higher education research is beneficial since “educational variables cannot be manipulated or created in the laboratory” and allows for the researcher to refer to samples that already exist (Johnson & Christensen, 2020).

The researcher examined archived institutional data from the community college for the proposed study. The purpose of reviewing archived data is to take advantage of data that has already been collected for a different purpose (Johnson & Christensen, 2020). The archived data was the primary data for the completed study. The study

determined whether the completion of First-Year Experience course effects student persistence at the community college. Furthermore, the researcher recognized that the identified independent variables would have influence (positive or negative) on the dependent variable.

Lastly, the study examined the impact on student persistence at the community college. Currently, persistence at the two-year institutions have decreased by 3% over the last three academic years (2016-2017 cohort persistence rate was 43.6% and the 2020-2021 cohort was 40.6%). However, the graduation rate has remained steady between 22.9% to 23.4% (www.volstate.edu/factbook). The study tested the impact of the First-Year Experience course completion (independent variable). The research independent variable examined student gender along age and race to determine if either predictor variables are linked to higher student persistence. The study examined the evidence to either support or disprove the hypothesis.

Analysis of the Data

The study's hypothesis, the effect of the first-year experience course on student persistence, was tested by using a Chi-Square test to determine if there is a relationship between the dependent variable between two categorical variables. The purpose of using the Chi-Square was to test the assumption that each categorical variable relationship between the variables (Fields, 2018). The demographic information of race, biological sex, and age will have an effect on persistence. The analysis of a Chi-square test can become complex; however, the level of complexity is offset when the evidence is formatted into an expected frequency (Fields, 2018).

The analysis included the use of contingency tables as a way to determine the association between variable frequencies. Johnson and Christensen describe a contingency table as a means of “displaying information in cells formed by the intersection of two or more categorical variables.” The use of contingency tables allows for the associations for a “two-dimensional” representation of the information. There are a variety of contingency that the information can be displayed (observed cell frequencies, row percentages, column percentages) (Johnson & Christensen, 2020). The use of a contingency table allows for the comparisons of independent variables across the rows of the table or simply providing a picture of relationship between two or more independent variables (Hessing, 2021).

Johnson and Christensen explain the Cramer’s V as an opportunity for the examination of the relationship between two categorical variables which allows for the representation of the correlation between two variables. When used alongside the Chi-Square, Cramer’s V as the preferred due to the ability to obtain a minimum value of 0 (Johnson & Christensen, 2020).

Chi-square Test Analysis

A Chi-Square was performed on the study utilizing the following variables: dependent variable – student persistence and independent variables of student race, biological sex, and age who complete the first-year experience course. The Chi-Square test is used to test the correlation between the observed results with the expected results. In other words, is there a significant relationship between student persistence and the completion of the First-Year Experience course.

The study included a Chi-Square test where the relationship between two categorical variables is examined. However, the Chi-Square test can also point towards the relationship between the examined variables. The goal of this statistical test is to compare the observed data results with the hypothesis to determine if the results are accurate.

This study also analyzed other outputs from SPSS to measure the strength and effect size between the variables. This additional analysis was conducted by computing the odd's ratio to measure the effect size. In other words, is there a significant relationship between student persistence and the completion of the First-Year Experience course. A formula found in Fields text was used for this study:

$$\text{Odds persistence} = \frac{\text{yes persistence / number of students}}{\text{no persistence / number of students}}$$

In order for the researcher to determine the odds of persistence among each variable group, the number of those who did not persistence was divided by the total number of students in the group. Next, the researcher used the number of those who did persist and divided by the number of students who did not persist to find the odds ratio for that variable group. The process for calculation was performed for the individual groups among the variables. The researcher calculated the odds ration utilizing the following calculation:

$$\text{Odds} = \frac{\text{Odds ratio results group 1}}{\text{Odds ratio results group 2}}$$

This allowed the researcher to examine the effect of the odds ration among each group to analyze the differences related to the group's persistence.

Chi-Square Assumptions

A Chi-Square test is used to determine if a relationship exists between two categorical variables (Fields, page 838). The assumptions for this proposed study, based on a Chi-Square test are:

1. Each person, item, or entity must contribute to only one cell of the contingency table.
2. All *expected counts* should be greater than 1 and no more than 20% of the expected counts should be less than 5.

Chapter Summary

The methodology used for this study was presented in this chapter. The archived data for Fall of 2020 and Fall of 2021 from a community college in middle Tennessee was utilized. A total of 4113 students from two semesters was collected for this examination. The researcher selected age, gender, race, and completion of the FYEX course as the variables for this study. The chi-square test of independence was run to determine if there was a significant association between the variables. Each of the selected variables were analyzed and the results were presented in contingency tables, a chi-square analysis, Cramer's V test, and odds ratios. The results of these analyses will be discussed in Chapter IV.

CHAPTER IV.

RESULTS

Introduction

The study investigated the relationship between taking the FYEX course and persistence, age and persistence, biological sex and persistence, and race and persistence amongst a community college population. The dataset of archived data was requested by the researcher with the following parameters: age, gender, race, completion of the FYEX course, and persistence. The data analyst at Volunteer State Community College organized the data in two SPSS dataset with the requested variables for the researcher; one representing the 2020 registration year and the second representing the 2021 registration year. The researcher then merged the community college data into one dataset and then conducted a chi-square analysis with the provided data. The statistical methods used on the dataset will be presented in this chapter.

Descriptive Statistics

The information found in Table 2 illustrates the demographic characteristics of the 4113 students from the two combined academic registration years: 2020 and 2021. The number of participants in the study was ($n = 4113$). The students were then categorized by age 18-24 ($n = 3523$), 24-31 ($n = 269$), and 32 and over ($n = 321$), by gender female ($n = 2433$) and male ($n = 1680$), and race, White ($n = 3261$), Black ($n = 490$), Unknown ($n = 127$), and All Others ($n = 235$), Spring Here (persistence) yes ($n = 2741$) and no ($n = 1372$).

Table 2.

*Characteristics of Students that Have Taken and Have Not Taken FYEX Courses
(N=4113)*

Characteristic	<i>n</i>	%
Age		
18-24	3523	85.7
24-31	269	6.5
32 and over	321	7.8
Total	4113	100
Gender		
Female	2433	40.8
Male	1680	59.2
Total	4113	100
Race		
White	3261	79.3
Black	490	11.9
Unknown	127	3.1
All Others	235	5.7
Total	4113	100
Spring Here		
Yes	2741	66.6
No	1372	33.4
Total	4113	100

Chi-Square Test of Independence Analysis

The contingency table found in Table 3 was used to understand the frequencies between the completion of the FYEX course and persistence. The contingency table meets the chi-square test assumptions, as each subject contributed to one cell of the

contingency table and there were no expected counts less than 5. Results from Table 3 demonstrate that there was not a significant association between the completion of the FYEX course and persistence $\chi^2(1)=.007, p = .936$. *Cramer's V* = .001, $p = .940$

Table 3.

Frequencies among FYEX and Persistence (N = 4113)

		Persistence			
		No	Yes	Total	
Took FYEX	No	Count	1014 _a	2029 _a	3043
		Expected Count	1015.1	2027.9	3034
		% within TookFYEX	33.3%	66.6%	100.0%
		% within SpringHere	73.9%	74.0%	74.0%
		% of Total	24.7%	49.3%	74.0%
		Standardized Residuals	.0	.0	
	Yes	Count	358 _a	712 _a	1070
		Expected Count	356.9	713.1	1070.0
		% within TookFYEX	33.4%	66.6%	100.0%
		% within SpringHere	26.1%	26.0%	26.0%
		% of Total	8.7%	17.3%	26.0%
		Standardized Residuals	.1	.0	
Total		Count	1372	2741	4113
		Expected Count	1372.0	2741.0	4113.0
		% within TookFYEX	33.4%	66.6%	100.0%
		% within SpringHere	100.0%	100.0%	100.0%
		% of Total	33.4%	66.6%	100.0%

Pearson's Chi-Square $\chi^2(1)=.007, p = .936$

Cramer's V = .001, $p = .940$

Table 4 demonstrates the results of the contingency table used to test the frequencies between gender and student persistence. The contingency table met the chi-square test assumptions, as each subject contributed to one cell of the contingency table and there were no expected counts less than 5. Results from Table 3 demonstrate there was a significant association between Gender and student persistence $X^2(1) = 13.930, p < .001$ and *Cramer's V* = .058, $p = .001$ indicates a significant, yet weak association between the independent and dependent variables. The odds ratio shows that female students (68.9%) are 1.28 more likely to persist than male students (63.3%).

Table 4.

Frequencies among Gender and Persistence

		Persistence			
		No	Yes	Total	
Gender	Female	Count	756 _a	1677 _b	2433
		Expected Count	811.6	1621.4	2433.0
		% within Gender	31.1%	68.9%	100.0%
		% within Persistence	55.1%	61.2%	59.2%
		% of Total	18.4%	40.8%	59.2%
		Standardized Residuals	-2.0	1.4	
		Male	Count	616 _a	1064 _b
Expected Count	560.4		1119.6	1680.0	
% within Gender	36.7%		63.3%	100.0%	
% within Persistence	44.9%		38.8%	40.8%	
% of Total	15.0%		25.9%	40.8%	
Standardized Residuals	2.3		-1.7		
Total	Count		1372	2741	4113
	Expected Count	1372.0	2741.0	4113.0	
	% within Gender	33.4%	66.6%	100.0%	
	% within Persistence	100.0%	100.0%	100.0%	
	% of Total	33.4%	66.6%	100.0%	

Chi-square $X^2(1) = 13.930, p < .001$

Cramer's V = .058 $p = .001$; *OR* = 1.28

Table 5 demonstrates the contingency table used to test the frequency of Race and student persistence and that it met the assumptions of the study. There was a significant association between Race and student persistence $X^2(1) = 25.519, p < .001$. *Cramer's V* = .080, $p < .001$ indicated that there was a significant, but a weak association between the independent and dependent variables. The odds ratio showed that White students (76.8%) were 1.60 times more likely to persist than Black students (56.9%), 1.22 times more likely than "All Other" students (71.9%), and 1.19 times more likely to persist than the Unknown race group (63.8%). Also, the odds ratio showed that for students in all other race group (71.9%) were 1.93 times more likely to persist than Black students (56.9%) and 1.45 times more likely to persist than students in the Unknown category (63.8%). Lastly, the odds ratio showed that students in the Unknown category (63.8%) were 1.33 times more likely to persist than Black students (56.9%).

Table 5.*Frequencies among Race and Persistence*

		Persistence			
		No	Yes	Total	
Race	Unknown	Count	46 _a	81 _b	127
		Expected Count	42.4	84.6	127.0
		% within Race	36.2%	63.8%	100.0%
		% within Persistence	3.4%	3.0%	3.1%
		% of Total	1.1%	2.0%	3.1%
		Standardized Residuals	0.6	-0.4	
	All Other	Count	66 _a	169 _b	235
		Expected Count	78.4	156.6	235.0
		% within Race	28.1%	71.9%	100.0%
		% within Persistence	4.8%	6.2%	5.7%
		% of Total	1.6%	4.1%	5.7%
		Standardized Residuals	-1.4	1.0	
	Black	Count	211 _a	279 _b	490
		Expected Count	163.5	326.5	490.0
		% within Race	43.1%	56.9%	100.0%
		% within Persistence	15.4%	10.2%	11.9%
		% of Total	35.1%	6.8%	11.9%
		Standardized Residuals	3.7	-2.6	
	White	Count	1049 _a	2212 _a	3261
		Expected Count	1087.8	2173.2	3261.0
		% within Race	32.2%	76.8%	100.0%
% within Persistence		76.5%	80.7%	79.3%	
% of Total		25.5%	53.8%	79.3%	
Standardized Residual		-1.2	.8		
Total	Count	1372	2741	4113	
	Expected Count	1372.0	2741.0	4113.0	
	% within Race	33.4%	66.6%	100.0%	
	% within Persistence	100.0%	100.0%	100.0%	
	% of Total	33.4%	66.6%	100.0%	

Chi-square: $X^2(1) = 25.519, p < .001.$

Cramer's $V = .080, p < .001$

Table 6 demonstrates the results of the contingency table used to test the frequency between age and student persistence. The contingency table met the chi-square test assumptions, as each subject contributed to one cell of the contingency table and there were no expected counts less than 5. Results from Table 5 demonstrate that there was not a significant association between age and persistence *Chi-square: $X^2(1) = 2.338, p = .311$. Cramer's $V = .024, p = .309$* indicates not a significant association between age and persistence.

Table 6.

Frequencies among Age and Persistence

			Persistence		
			No	Yes	Total
Age	18-24	Count	1189 _a	2334 _b	3523
		Expected Count	1175.2	2347.8	3523.0
		% within Age	33.7%	66.3%	100.0%
		% within Persistence	86.7%	85.2%	85.7%
		% of Total	28.9%	56.7%	85.7%
		Standardized Residuals	.4	-.3	
	25-31	Count	88 _a	181 _a	269
		Expected Count	89.7	179.3	269.0
		% within Age	32.7%	67.3%	100.0%
		% within Persistence	6.4%	6.6%	6.5%
		% of Total	2.1%	4.4%	6.5%
		Standardized Residuals	-.2	.1	
	32 and older	Count	95 _a	226 _b	321
		Expected Count	107.1	213.0	321.0
		% within Age	29.6%	70.4%	100.0%
		% within Persistence	6.9%	8.2%	7.8%

	% of Total	2.3%	5.5%	7.8%
	Standardized Residuals	-1.2	.8	
Total	Count	1372	2471	4113
	Expected Count	1372.0	2471.0	4113.0
	% within Age	33.4%	66.6%	100.0%
	% within Persistence	100.0%	100.0%	100.0%
-	% of Total	33.4%	66.6%	100.0%

Chi-square: $X^2(1) = 2.338$, $p = .311$

Cramer's $V = .024$, $p = .309$

Chapter Summary

This chapter presented the results of the chi-square analysis in this study. In conclusion the researcher was able to answer all four of the research questions. Research Question 1. There is not an association between student completion of the First Year Experiences and persistence at Volunteer State Community College. Research Question 2. Race is associated with student persistence at Volunteer State Community College. Research Question 3. Biological sex is associated with student persistence at Volunteer State Community College. and Research Question 4. Age is not associated with student persistence at Volunteer State Community College.

The researcher was able to accept the following Research Hypotheses:

H²: Race is associated with student persistence at Volunteer State Community College.

H³: Biological sex is associated with student persistence at Volunteer State Community College.

The researcher was not able to accept the following Research Hypotheses:

H₁: Completion of the First Year Experience Course is positively associated with student persistence at Volunteer State Community College.

H₄: Age is associated with student persistence at Volunteer State Community College.

In Chapter V the results will be discussed along with recommendations for future research.

Chapter V.

Discussion

This research study focused on investigating the relationship between the completion of a First Year Experience course and persistence at a community college in Middle Tennessee. The researcher examined the study's research questions and hypotheses using a chi-square analysis. The findings, though not corresponding with all of the hypotheses of the study, provide information that can be utilized to guide and support future research associated with improving student persistence at the community college level.

The first hypothesis states; students who complete the First Year Experience Course is associated with persistence among community college students. The results of the chi-square analysis indicate no significant association between students who complete the First Year Experience and persistence. After examining the results of the chi-square analysis, the first hypothesis must be rejected by the researcher. The Cramer's V test also pointed to no significant association between students who complete the First Year Experience course and persistence.

Research surrounding First Year Experience courses shows that "students involved in some type of organized first-year intervention report higher levels of satisfaction and involvement on campus and are more likely to persist and be retained" (Jamelske, 2009). Research focused on persistence at the community college level can possibly affect course planning, strategic planning, and policies related to community college students. However, this does not appear to be the case in this particular population of community college students.

The descriptive statistics illustrate a total of 4113 students were enrolled in a fall semester. Out of the 4113 students, 2741 students returned the following spring and 1372 did not. However, when examining the association, the First Year Experience course had on persistence only 712 out of 1070 students who completed the First Year Experience course persisted while 2029 students out of 3043 who did not complete the First Year Experience course persisted. The background information on the students taking the course and students who did not take the FYEX course since both groups had the same persistence rate of 66% while the number of students not completing the course was higher than the students taking the course. The results do not support the hypothesis examined in this study.

The second hypothesis stated that race is associated with student persistence among community college students. The results of the chi-square test indicate that there is a small association between race while the Cramer's V presents a weak association student persistence at .08. This provides some insight on each race group and how they persist at the community college in Middle Tennessee. The descriptive statistics of this study illustrate a race break down of the campus population as 3.1% Unknown, 5.7% All Others, 11.9% Black, and 79.3% White. The national percentage of Black students attending community colleges is 13.8%, a higher rate than the percentage of Black students at Volunteer State Community College. While there is a decrease in Black students attending college since 2010, Volunteer State Community College has seen an increase in Black student enrollment.

The third hypothesis stated that gender is associated with persistence within community college students. The results of the chi-square test illustrate a significant association between gender and persistence while The Cramer's V test indicated a small association amid gender and persistence. The contingency table illustrates that female students are persisting more than males. (Females at 68.9% and Males at 63.3%) The examination of research has shown that female students tend to persist more than male students (Juszkiewicz, 2020). The odds ratios for gender illustrate that females persist 1.28 than males at this community college.

The Fourth hypothesis stated that age is associated with persistence among community college students. The results of the chi-square test indicate indicated no significant association among age and persistence. The Cramer's V test also pointed to a weak correlation between the two variables.

Conclusions and Recommendations

There has been a push to increase persistence at the community college level because the role community colleges play in higher education. Community colleges serve more than half of undergraduate students in the United State (Goldrick-Rab, 2010). In 2020, Armstrong et al., presented that over 5.4 million students were in community colleges in 2019. The increasing diversity of community colleges students (age, race, and readiness) play a role in student persistence (CCRC Factsheet, 2021). The state of Tennessee has seen an influx of students attending community college since 2015 when the Tennessee Promise initiative was implemented. The Tennessee Comptroller of the Treasury in 2021 reported an increase of student college-going rate by 6 percentage points, 58.6% to 64.4% in 2015 (Tennessee Comptroller of the Treasury report, 2021).

However, there was a decrease between 2015 and 2019. The 2019 rate was reported at 61.8% while this is still higher than the years prior to the start of the Tennessee Promise it is lower than the first year of the program (Tennessee Comptroller of the Treasury report, 2021). Since the start of the Tennessee Promise more students to have remained enrolled and on track to graduate since the start of the initiative. It is important to note that the Tennessee Comptroller of the Treasury report and the Tennessee Promise Annual Report do not mention persistence rates. Both reports illustrate data of such as: still enrolled, no award; still enrolled, earned award; graduated, dropped out. Due to the COVID-19 pandemic, the Tennessee Student Assistance Corporation (TSAC) mentioned changes made to Tennessee Promise Eligibility. These changes revolved around deadlines, delivery methods of mandatory meetings, and waiving community service requirements. According to the Factbook presented at volstate.edu, there was a slight decrease in enrollment from 9144 students in the Fall of 2019 to 7417 in the Fall of 2021. However, persistence had an increase from 67.6% in persistence in 2019-2020 to 69.2% in 2021-2022. An examination focusing on student persistence at the community college during the pandemic is recommended since persistence increased while enrollment decreased.

The findings of this study are similar to findings from the Community College Research Center illustrating that student attendance at community colleges dropped in the fall of 2020 (CCRC, 2020). Institutions shifted to support current students to persist. However, while faculty and administration scrambled to provide new ways for students to learn student achievement was affected (Schleicher, 2020) due to the lack of typical learning experiences. Students from lower socio-economic households were affected at a higher rate due to limitations of lockdown and limited learning activities (Casanova,

Gomes, Moreira, & Almeida, 2022). Regardless, more research is needed to support students to persist at the community college level.

While Volunteer State decided to implement the First-Year Experience Course (FYEX 1030 and FYEX 1040) based on the research suggesting the impact this type of course has on student outcomes the results were the opposite. Students completing the courses did not persist at a higher number than students who did not. This could be a result of the number of students completing the course (1070) was lower than students who did not enroll in the course (3043). The results of this study suggest the opposite of what national research implies on student completion of the First-Year Experience course. The study's findings illustrate that completion of the First-Year Experience course did not influence persistence while Cueso, in 2010, discusses a significant effect on student persistence. Further research is needed to determine why the course did not impact student persistence at Volunteer State Community College.

Community colleges have a diverse population of students. However, the descriptive statistics from this study illustrate a less diverse population of students at Volunteer State Community College. According to the Tennessee Board of Regents Community College dashboard, the percentage of white students is 11.4% higher at Volunteer State Community College. The descriptive demographics represent the 11 counties that are in the Volunteer State Community College service area. Historically, there has been a gap between minority groups at Volunteer State Community College which is why more research is needed on how to support students of differing races.

The findings of this study are similar to the research discussing the implication that female students persist at a higher rate than male students (Juskiewicz, 2020). Theories suggest that costs and incentives are different between male and female students (Conger, 2009). Reportedly, male students are more likely to enroll in programs with stricter standards. However, since the studies completed by Juskiewicz in 2020 and Conger in 2009 have varying results it is recommended that studies examining the numerous variables that impact gender persistence is completed.

Lastly, learning on campus can be segregated by age. Community colleges are beginning to take fresh look at age due to an increase of non-traditional students. College campus population is typically consisted of students from their late teens to early 20s while half of the population at community colleges are over the age of 24 with 28% have children or dependents (CCRC Factsheet, 2021). Research examined by the Community College Research Center in 2021 and presented in the Policy Factsheet states that “nearly 160% of public two-year college students are financially independent with 37% of students making less than \$20,000 a year. However, this research study illustrates that similar persistence percentages across the three age groups (18-24, 25-31, and 32+). Due to an increase in attendance of students 25-31 and 32+ more research is needed looking at persistence and adult learners.

Limitations

While the results of the main hypothesis of this study were found to not be significant it is important to recognize that the results were sampled from a single site which may or may not be generalizable to other community colleges in the region. The study consisted of variables of completion of a First Year Experience course, race,

gender, and age. Hence, the results of the study provide a minimal frame of reference in terms of student persistence.

The first limitation in this study is that the data is collected from Volunteer State Community College and does not represent the other community colleges in the state of Tennessee. This contributes to the weak association among all independent variables examined in the Cramer's V test. As a result, this weak association illustrates that other community colleges may have different results when examining the effect of the variables.

The second limitation is related to the persistence of students who completed the First Year Experience course and not those who may have completed the Student Success course. The Student Success course was implemented alongside the start of the Tennessee Promise. Also, the First Year Experience Course is imbedded in some programs of study requiring students to complete the course and other programs do not require students to complete the course. It might be interesting to examine persistence if the participation percentage was higher.

Future Research Applications

Future research involving community college student persistence can be designed using the research questions, hypothesis, test results, and limitations of this study. The recommendations to incorporate other variables such as part-time and fulltime status, first-generation students, socio-economic status, high school GPA and the effect on persistence at the community college. A mixed-method research design also recommended due to the design's ability to collect qualitative results while analyzing quantitatively.

The first recommendation for further research is to look at variables that include part-time and full-time employment along with family responsibilities. These variables are important to the investigation of student persistence since it have provided an additional layer of understanding. Strom & Strom (2013) presented employment as the biggest obstacle to persistence rates due to 60% of college students work 20 hours a week and one-third of students work more than 35 hours. Students struggle to find balance between work and academics which can have an effect on a student's ability to persist. Paying for rent and providing food while paying for college also hinder a student's ability to persist (Herder, 2021). Both researchers provide insight specific to community college students which can be helpful when examining family responsibilities as related to persistence.

A second future research recommendation is mixed method approach utilizing a qualitative element that allows for more insight into the experiences of a First-generation student and how it effects persistence. Westbrook and Scott (2012) conducted a mixed-method study using data collected from three different quantitative instruments along with a locally designed survey. The purpose of their study was to examine the influence parents have on first-generation students while examining self-efficacy of the student (Westbrook & Scott, 2012). Utilizing a similar research design will provide insight to the persistence and other outcomes of the first-generation student. The researcher can utilize a qualitative research design such as case study by if the FYEX course provided them with the skills needed to be successful. The researcher can also discuss if being a first-generation college student caused them to struggle due to a lacking understanding of the experience from parents. This type of qualitative design allows for the participants to

discuss their experiences objectively through interviews, observations, and collecting of documents. A case study research design allows for the development of the big picture to determine if the FYEX course provided the students with the necessary resources.

A third recommendation for further research is to examine student income and how it affects persistence. A student's ability or inability to pay for college has been linked to having an effect on persistence (Cabrera, Casteneda, Nora, & Hengstler, 1992, Johnson, Rochkind, Ott, and DuPont 2011, Strom & Strom, 2013). Findings support income as an indicator of student persistence along with student financial aid. Several past studies state that socio-economic factors play a role in whether a student persists. Since financial aid availability is unpredictable it is necessary to examine the role financial aid plays on persistence (Johnson et al, 2011). In a study completed by Strom and Strom (2013) 60% of students who drop out of college were paying their own tuition because they could not rely on family for tuition assistance. An initial study utilizing a quantitative research design can provide an understanding to how income can affect student persistence.

A fourth recommendation for further research is to look further into the effect of the First Year Experience course on retention and graduation rates in a mixed methods format. A mixed methods research design allows for student experiences and decisions lead to persisting to the next semester and ultimately program completion. Interviews, surveys, and focus groups can help the researcher to investigate student persistence and retention. Implementing a research question of a phenomenology research design allows to the researcher to understand the FYEX course thru student interpretation. The researcher can ask "How did the FYEX course prepare you for a successful college

experience?” It provides the researcher with the ability to understand the core experience of the FYEX course. This type of study provides opportunity for student stories to be shared and enhances the quantitative data to help modify current persistence initiatives.

A fifth recommendation for further research is to investigate the FYEX 1030 and FYEX 1040 course and why the course did not have an effect on student persistence at Volunteer State Community College. The Quality Enhancement Plan illustrated a course design with learning outcomes to “provide students with the tools they need to be successful in the classroom and beyond” (VSCC QEP, 2019). A qualitative research design exploring the student perspectives can provide an in-depth look at the course outcomes and student experiences. The researcher can implement a grounded theory research design which allows for a deep dive into the meanings behind the students’ explanations of experiences. The researcher can pose the question of “Which types of instructional methods were used in the FYEX course and which ones were more beneficial?” The participants must have completed the course to answer the interview questions that describe their personal experiences with the instructional methods. The qualitative research design can possibly identify the successful and unsuccessful components of the course. The evidence collected can be utilized to develop a first-year course that can support students and increase persistence.

A sixth recommendation for future research examines student high school GPAs and does it have an effect on student persistence. The quantitative research design looks at whether a high school GPA below 2.5 causes students to leave the campus after the first semester. In a study conducted by Stewart, Lim, & Kim in 2015, illustrates that high school GPA paired with first semester were significant predictors of persistence. The data

from a study can provide insight to the college on how to properly support students with lower high school GPAs and increase student persistence.

Lastly, a study that investigates how the pandemic affected student persistence and retention at community colleges in Tennessee. Lee Gardner (2021) discussed how Southwest Community College in Memphis dealt with the equities that came to light throughout the pandemic and how the college is trying to find their way back to normalcy. Utilizing a similar framework, Tennessee Board of Regents community colleges can present their narratives. A narrative qualitative study focusing on how the pandemic impacted student persistence and retention at their institution. The anecdotal evidence allows for the research to share stories of how each institution handled the pandemic while supporting students.

Future Practical Applications

The results of this study can benefit higher education administrators looking to improve persistence rates at community colleges. College presidents and vice presidents, Chancellor of the Tennessee Board of Regents, state legislatures, and various community college stakeholders are also individuals who would find interest in this study. The results of this study provide insight to student persistence at the community college level and can be used to establish student success initiatives to increase persistence.

Student persistence, along with retention and graduation rates, is a responsibility of the student and the community college. Student persistence attributes to academic performance, so the implementation of individualized academic plans paired with advising may have an effect on student persistence. For example, students may benefit from the support of a consistent advisor who has a connection to the student, understands

their future goals, academic interests, and outside obligations (employment and family). An individualized academic and advising plan may help to increase student persistence at the community college.

The community college recognizes the role of faculty, staff, and administration in student outcomes such as persistence and retention. The results of this study can provide a framework to develop a newer version of the FYEX course to provide students the skills needed while allowing for the development of connections within the course. Students can benefit from taking a similar concept as a seminar. The goal of this type of course is to help new students connect to the campus, engage in their courses, and learn the necessary skills for their future careers.

Chapter Summary

Educational research allows for institutions of higher education, in particular, community colleges to examine the effects of initiatives on students. Whether the focus is persistence, retention, or enrollment research provides a context within decision making can occur. This study, the researcher assumed that students who complete the First Year Experience course would persist at a higher level than students who did not take the First Year Experience course. The results of this study prove this assumption to be false. The outcome of the study illustrates that we may implement initiatives that are meant to support students, yet the research proves something else. This is a prime example of using data to make decision that can impact the institution.

The purpose of this study was to examine the effect the completion of the First Year Experience course has on community college student persistence. The result indicate that the completion of the course has no significant association to persistence.

Students who completed the First Year Experience course persisted at the same rate as students who did not complete the First Year Experience course. Since the results of the study are based on one study with data from one institution then the evidence cannot be considered for casual correlation. However, further examination of this topic should provide information valuable to community college persistence.

Lastly, the recommendations for future research and practical applications include increasing the sample to include all community colleges within the state to provide a larger representation of students. This deeper examination of the effect of completion of the First Year Experience course on persistence could provide a meaningful tool to increase persistence and increase retention. This study can be a useful framework for examining community college student persistence.

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