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Tennessee Promise and Two-Year Community College Retention and Graduation in Rural Appalachia

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Tennessee Promise and Two-Year Community College Retention and Graduation in Rural

Appalachia

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ABSTRACT

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The purpose of this quantitative, non-experimental study was to explore the relationship between the implementation of the Tennessee Promise scholarship program and the two-year Tennessee community college retention rates and graduation rates of first-time, full-time Tennessee students from rural Appalachian counties. Results from this study may help higher education stake-holders better understand the features of Tennessee Promise that are influencing an increase in community college retention and graduation rates for Tennessee students from rural Appalachian counties. The theoretical framework that guided this research was the social capital framework. Data including use of Tennessee Promise, county of origin, retention, and graduation was collected via secure email from seven Tennessee community colleges. The null hypotheses of twelve research questions were tested through SPSS via two-way contingency table analyses using crosstabs. The results revealed that retention and graduation rates of first-time, full-time Tennessee students from rural Appalachian counties attending the participating Tennessee community colleges were significantly higher with the use of Tennessee Promise.

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DEDICATION

I would not have had the fortitude to finish this program without the encouragement and support of my family and friends. To my parents and my daughters, Andi, Olivia, and Molly, thank you for cheering me on and pushing me along through the entire journey. Thank you, Kendra, for telling me often that I absolutely could not quit. Thank you to my coworkers, Ariane and Heidi, for giving me great practical advice. There are not enough words to thank my dear Sam, my biggest cheerleader, who endured hours of my working when we could have been out doing something fun, listened when I was panicked and discouraged, and always had the exact right words to say to keep me going. My sincere thanks to all who have helped me along the way.

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Chapter 1. Introduction

Citizens of rural Appalachia are among the poorest of the poor in the United States. Not only is the Appalachian population lower in household income and bachelor's degrees than the rest of the country, rural Appalachians are also below urban Appalachian and rural non-Appalachian citizens in these areas (Pollard & Jacobsen, 2021). Mosley and Miller (2004) noted that, "Persistent poverty is overwhelmingly a rural problem," with the Appalachian region being an area in the United States with dense poverty (p. 2). Several factors contribute to this poverty. Hewitt et al. (2018) explained that a lack of business and industry in rural areas results in lesser tax income. Cost of living in rural areas is on par with many urban areas, but salaries are lower and driving distances to reach frequently needed goods and services are greater (Zimmerman et al., 2023). Because many rural communities were already in a fragile economic state, the COVID-19 pandemic had especially devastating economic effects in rural areas (Mueller et al., 2021). Cleveland et al. (2012) stated that the poorer economic state in rural communities is directly linked to education.

Rural Appalachian citizens have struggled to improve impoverished conditions partially due to a lack of post-secondary education, a loss of local employment opportunities, and an unwillingness to relocate (Chenoweth & Galliher, 2004; McDonough et al., 2010; Nardella, 2022). Less than one-third of high schoolers from disadvantaged Tennessee families enroll in any form of college (Complete Tennessee Leadership Institute, n.d.). However, recent initiatives that could assist the Appalachian region have been launched, including an extensive highway completion and improvement program (United States Department of Transportation, 2022), the Infrastructure, Investments, and Jobs Act (Wade, 2022), and the Access to Broadband Act of 2021 (United States Census Bureau, 2023). Organizations such as the Center on Rural

Innovation partner with rural business leaders to bring tech jobs to rural communities (Center on Rural Innovation, 2023).

Students in Appalachia are likely to not have a college graduate in their families and therefore do not have family help to properly navigate applying for admittance and financial aid (Ali & Saunders, 2006; Pollard & Jacobsen, 2021). Rural Appalachian students, "represent a unique and underserved group in an environment that is culturally rich and facing severe economic challenges," (Ali & Saunders, 2006, p. 38). Internet access is less accessible in the mountainous regions of rural Appalachia than the rest of the nation, which limits students' access to research vocations and educational opportunities (Bennett, 2008; Pollard & Jacobsen, 2021). Students frequently rely on their schools to guide them through applying for financial aid and college admittance (McShane & Smarick, 2018).

Because of a cultural desire to stay near home, a lack of employment opportunities that require more than a two-year college degree, and a secondary education that is often lacking, community college is a promising option for rural Appalachian students (Byun et al., 2012b; McDonough et al., 2010; Nardella, 2022; Young, 2013). As stated by Fong et al. (2018), "success at the community college level has considerable implications for students that are underrepresented in higher education and perhaps come from challenged backgrounds," (p. 370). As early as 2006, Ali and Saunders recommended programs that involved focused guidance for high school students and their parents. Tennessee Promise is a program that is designed to provide such guidance (Tennessee Higher Education Commission (THEC), n.d.-a).

Beginning with the high school graduating class of 2015, Tennessee Promise has been available as a "last dollar" scholarship to any public Tennessee two-year community college or technical program, as well as some private two-year colleges. This means Tennessee Promise

funds are granted after all other government aid has been applied (Nguyen, 2020; THEC, n.d.-a). Students are not required to have limited family income, hold any particular GPA, or have a resume of specific courses beyond those required for graduation (Nguyen, 2020). To qualify, students must fill out minimal paperwork, file a Free Application for Federal Student Aid (FAFSA), attend three meetings with a provided mentor, and complete eight hours of community service (Nguyen, 2020; THEC, n.d.-a). Once enrolled in a two-year program, students must continue with full-time enrollment, eight hours of community service per semester, filing the yearly FAFSA, and maintaining a 2.0 minimum GPA. While an increase in community college enrollment has occurred in the years since Tennessee Promise began, only about half of the students are completing their program (THEC, n.d.-a).

Statement of the Problem

Citizens of rural Appalachia struggle with poverty and lack of education (Pollard & Jacobsen, 2021). With built-in guidance to combat common post-secondary education obstacles, Tennessee Promise stands as a possible help for all Tennessee students, including rural Appalachian students living in Tennessee (THEC, n.d.-a). This study is an attempt to gain insight into the success of the Tennessee Promise program in increasing two-year degree completion among rural Appalachian Tennessee students.

Significance of the Study

Academic research surrounding rural education is severely lacking (Harris & Hodges, 2018; McShane & Smarick, 2018). While the plight of struggling urban schools has been studied extensively, rural students, who make up around 1/5 of the United States student population, have been largely ignored (Harris & Hodges, 2018). Very little research has been done regarding Tennessee Promise and rural schools, much less rural Appalachian districts. Many rural

communities have been struggling with increasing unemployment and opioid drug abuse, and have been left to deal with these issues with little to no help (Hawley et al., 2016). Schools have a responsibility to provide resources to help students with family and community problems (McShane & Smarick, 2018). McShane and Smarick (2018) stated:

> Today's rural students may end up, when compared to their suburban and urban peers, as less educated, less likely to work, and more likely to have lower-wage jobs. This could ultimately exacerbate the problem of intergenerational poverty in rural America. (p. 158)

Tennessee Promise is a potential tool to make the attainment of a post-secondary degree achievable. Due to cultural and economic factors, a two-year college or trade school degree, which is what Tennessee Promise funds, is especially appealing to rural Appalachian students (Byun, 2012a; McDonough et al., 2010; Young, 2013). It is important to analyze whether Tennessee Promise seems to be making a difference in these underserved rural communities, particularly in Appalachia, where the problems common to most rural areas seem to be amplified (Johnson et al., 2014). The results of this study may provide insight into the success of Tennessee Promise for rural Appalachian students and serve as a starting point for further study.

Purpose of the Study

The purpose of this study was to examine the relationship between the implementation of the Tennessee Promise scholarship program and the two-year Tennessee community college retention rates and graduation rates of Tennessee students from rural Appalachian counties.

Conceptual Framework

Coleman's social capital framework served as a foundation for the study. Social bonds formed through family, school, and community groups can have a great influence over a person's goal-setting and motivation. Once someone has invested social capital in a person, that person

feels an obligation to live up to perceived expectations. Social capital can be a factor in successfully guiding a high school student into college (Coleman, 1988).

Research Questions

The research questions that guided this non-experimental, quantitative study were as follows:

Research Question 1: Is there a significant difference in retention rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?

Research Question 2: Is there a significant difference in 3-year graduation rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?

Research Question 3: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation rates between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

Research Question 4: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise and matriculating from a county designated as rural Appalachian and students utilizing Tennessee Promise and matriculating from a county designated as rural non-Appalachian?

Research Question 5: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

Research Question 6: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

Research Question 7: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

Research Question 8: At the participating community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

Research Question 9: At the participating community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation

rates between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

Research Question 10: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise matriculating from a county designated as urban Appalachian and students utilizing Tennessee Promise matriculating from a county designated as urban non-Appalachian?

Research Question 11: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?

Research Question 12: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?

Definition of Terms

Appalachian counties are a group of counties in the eastern United States that mostly follow the path of the Appalachian Mountains. The counties are found in states extending from northern Mississippi to southern New York. Parts of 12 states and the entirety of West Virginia are included (Appalachian Regional Commission, n.d.-a).

Associate's degree is a two-year degree typically awarded by a community college or trade school.

Community college is a college whose highest degree offered is an associate's degree (Cohen & Brawer, 2008).

Economically at-risk county is a county that economically falls in the bottom 10-25% of the counties in the United States (Appalachian Regional Commission, n,d.-d).

Economically distressed county is a county that economically falls in the bottom 10% of the counties in the United States (Appalachian Regional Commission, n.d.-d).

Financial aid is financial assistance given or loaned from the United States government or private sources to college students for educational purposes (College Board, 2023-a).

Rural is a location that is five miles or greater from an urban area (National Center for Education Statistics, n.d.).

Rural county is a county that has a population that is greater than 50% rural (United States Census Bureau, n.d.).

Tennessee Promise is a scholarship offered to Tennessee high school students planning to attend a state community college or technical school that covers any remaining tuition and fees after all other aid is applied (THEC, n.d.-d).

Limitations and Delimitations

This study was limited by the fact that six of Tennessee's 13 community colleges chose not to participate. Also, other factors besides the implementation of Tennessee Promise could contribute to the community college success rate of students from rural Appalachian counties. A delimitation was the decision of the researcher to not include data from before the year 2010.

Summary

This study is organized and presented in five chapters. Chapter 1 describes the background of this study, including the statement of the problem, the purpose of the study,

research questions, theoretical framework, definitions, limitations, and delimitations. Chapter 2 is a review of the literature relevant to the study as related to the conceptual framework. Included are the topics: rural, Appalachia, poverty, community college, financial aid, and Tennessee Promise. Chapter 3 presents the methodology, including the research questions and research design, population and sample, variables and data collection strategies, data analysis, assessment of validity and reliability, and ethical considerations. Chapter 4 provides the findings of this study in relationship to the research questions. Chapter 5 provides an interpretation and discussion of the data as well as implications for practice and future studies.

Chapter 2. Literature Review

This literature review provides background for understanding the environment of students from rural Appalachia, a discussion of poverty and education, an analysis of community colleges, and an overview of college financial aid, with an emphasis on the Tennessee Promise program. Literature exploring the relationship between rural Appalachian students, community colleges, and Tennessee Promise is also presented and viewed through the lens of social capital.

Conceptual Framework

The framework for the study was the social capital framework as described by Coleman (1988). Social capital was explained as social resources (such as family, school, church, community) that shape a person's motivation to achieve goals. With proper guidance, strong social bonds create trust that can result in positive achievements. These bonds can also result in negative social norms being reinforced. A strong social connection in high schools can assist in moving students towards higher education. Bryan et al. (2017) reported, "Evidence suggests that school networks that convey information and expectations about college going are more adept at sending their graduating seniors to college," (p. 96). Coleman (1988) explained that social capital tends to be a give-and-take phenomenon. If a person or social entity invests in an individual with whom they have a social bond, then that individual feels a need to meet expectations while anticipating a fulfillment of any assurances made to them.

Crumb and Larkin (2018) described the importance of making the most of social capital found in rural areas to inspire students to pursue college. Rural high schoolers often do not have many connections with adults who have post-secondary degrees (Agger et al., 2018). Teachers and counselors are in unique positions as examples of persons with college degrees who have influence over students (Chambers et al., 2019). School staff can pass their enthusiasm and goals

for student success onto the students. Chambers et al. (2019) referred to these type of people as, "Dreamkeepers," and found that high schoolers from rural areas are more influenced by Dreamkeepers than urban students (p. 7). They stated, "it takes a village to cultivate the college aspirations of any student, but particularly rural students," (p. 8). McShane and Smarick (2018) stated:

> While urban and suburban communities have dense networks of social service agencies and a deep well of social capital, rural schools are often on their own to be a one-stop shop for the needs of the young people of their communities (p. 4).

Rural Communities

Definition

McShane and Smarick (2018) explained that rural is defined a number of different ways by a number of different government and research agencies, stating, "There is no one satisfying definition of 'rurality,' either statistically, geographically, or historically," (p. 3). No matter the definition used, rural communities are usually without close access to large medical, arts, recreational, retail, or educational venues and derive income from industries that are, "tied to the land-through farming, mining, drilling, or something similar," (McShane & Smarick, 2018, p. 2). For the purpose of this study, rural and urban were defined by the United States Census Bureau (n.d.). Rural is defined as neither urban nor an urban cluster. An urban population is greater than or equal to 50,000. An urban cluster has a population of 2,500 to 50,000 and a population density of 1,000 or more people per square mile. Geographic boundaries are not part of the definition, so this study defined rural counties as those with a population greater than 50% rural as designated by the United States Census Bureau (n.d.). Rural was further subdivided by the National Center for Education Statistics (NCES) (n.d.) into the subcategories fringe, distant, and remote, with a

range of locations from "less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster," to, "more than 25 miles from an urbanized area and also more than 10 miles from an urban cluster," (NCES, n.d., para. 3-5).

Culture

Citizens of rural communities see themselves as marginalized and ignored when compared to the needs of cities (Schafft, 2016). Because of a declining job market, increased drug problems, and poor physical and mental well-being, the perceived gap between how the government tries to solve urban problems compared with rural problems has caused a resentment and distrust of the government (Scoones et al., 2022). An "us" versus "them" mentality has been created, where the loss of jobs is equated with a loss of cultural heritage (Scoones et al., 2018; Ulrich-Schad & Duncan, 2018). Trust among community members is strong, with a great willingness to help one another (Ulrich-Schad & Duncan, 2018). Families are closely tied to each other and their home, and discouragement from moving away is strong, despite a grim view of the future (Schafft, 2016; Ulrich-Schad & Duncan, 2018). Hard work is highly valued and those that receive government aid are looked down upon (Ulrich-Schad & Duncan, 2018). Rural citizens are also aware of the stereotypical way rural people are portrayed in the media and the entertainment industry: unintelligent, racist, poor, backward, and stubborn to their own detriment (Kreiss et al., 2017). Racially, rural communities are nearly 80 percent white; politically, they tend to vote Republican, although there is an exceptionally high rate of the population that does not vote (Ulrich-Schad & Duncan, 2018; Gaventa, 2019).

Education

The state of rural education is not all discouraging. When compared to national averages, rural schools graduate more high school students. The tight-knit communities result in greater parent involvement and awareness and a more family-like atmosphere in the school (Malkus, 2018). Miller et al. (2019) found that there are fewer sources of stress, such as neighborhood crime and overcrowding, for rural students than urban students. According to McShane and Smarick (2018), "Rural communities can be imbued with an unusual level of pride – in their history, culture, traditions, work, and more. When trying to improve schools, this is a great asset," (p. 5).

The goals of rural education include the same desire to prepare students for employment and good-citizenship as other more populated regions across the United States. However, rural culture adds a layer of needing students to retain the heritage and principles of the community (McShane & Smarick, 2018). Rural schools are in a unique position of being trusted by stakeholders and, given the proper resources, being able to guide students on a journey out of poverty (Dahill-Brown & Jochim, 2018; Rachidi, 2018).

Rural schools may experience a deficit of resources such as Advanced Placement and other college prep courses, extracurricular activities, special needs services, and technology (Shuls, 2018). They are significantly behind the rest of the country in STEM education (Harris & Hodges, 2018). Poor pay, lack of professional support, and remote locations make it difficult to recruit and retain quality teachers (Player & Husain, 2018). Despite an attempt at aid from the Rural Education Achievement Program (REAP) enacted by the U.S. government, a disconnect between the requirements to receive aid and the realities of rural conditions resulted in little help for rural schools (Yettick et al., 2014). These shortfalls lead to more difficulty in college

admittance for rural young people. Furthermore, parents of rural students frequently are without college degrees (Malkus, 2018). School administration has been found to have low expectations of their students achieving college degrees (McShane & Smarick, 2018). The opioid epidemic currently ravaging many rural communities requires schools to take on an increasing parental role (Hale & Satel, 2018). Outsiders in a position to assist rural schools often face suspicion. Dahill-Brown and Jochim (2018) explained, "the politics of rural communities place strict limits on the extent to which outsiders can lend their ideas and support," (p. 59). Reform initiatives made by outsiders are often distrusted by school stakeholders who believe their unique needs and values are not understood. This perception, no matter the level of reality, results in a distrust of government efforts at school improvement (Dahill-Brown & Jochim, 2018).

Appalachia

Appalachia and Rural Appalachia

Appalachia consists of counties in states extending from northern Mississippi to southern New York. Twenty-six million people living in parts of 12 states and the entirety of West Virginia are included (Appalachian Regional Commission, n.d.-a). In general, the percentage of households below the poverty line is greater in Appalachia than the rest of the nation. Appalachian residents also fall seven percentage points below the nation in completion of four-year degrees (24.7%). However, the possession of a two-year degree among Appalachians (8.9%) is slightly above the national average (Pollard & Jacobsen, 2021).

For this study, rural Appalachian counties are those Appalachian counties with a population greater than 50% rural as designated by the United States Census Bureau (n.d.). Citizens of rural Appalachia are below urban Appalachians and rural non-Appalachians in the areas of household income and education (Pollard & Jacobsen, 2021). Ten and one-half million

people are citizens of rural Appalachia, with 1.3 million of those in Tennessee (Appalachian Regional Commission, n.d.-c; County Technical Assistance Service, n.d.).

Appalachian Tennessee

In Tennessee there were 52 counties that were considered Appalachian (TNECD, 2019). Of these, 42 were rural (TNECD, 2019; Tennessee State Government, n.d.). Of these counties, 28 were either economically distressed or at risk (Transparent Tennessee, n.d.). As in other states, the Appalachian counties of Tennessee suffer more economically than the other counties in the state (TNECD, 2019).

Appalachian Culture

An intense devotion to family and place is a major characteristic of Appalachian culture. Like most parents, Appalachian parents desire a better life for their children and understand college may help to achieve it. However, they often do not know how to help them reach this goal (Hlinka, 2017). An intense bond to family often results in a refusal to leave the area despite poor employment opportunities (Ulrich-Schad & Duncan, 2018).

Religion and church life often play an important role in Appalachian families, with ministers being called on to visit the sick, perform weddings and funerals, and counsel through difficulties. Church members rally around families during times of celebration and crisis. While this is not unique to Appalachian culture, the adherence to place results in extended families being rooted in one congregation for multiple generations (Denham, 2016).

A limited number of career choices further limits opportunities for many in Appalachia. Students are often misinformed about being able to support themselves with local employment available without a college education. Furthermore, the types of jobs traditionally available in the region have decreased significantly since 2000, increasing the need for schools to educate

students on possible careers outside what their families have traditionally held (Gibbons et al., 2017).

Despite many negative aspects, both real and stereotyped, Appalachian culture has some positive qualities. The culture is rich with artistic tradition, crime rates are low, relationships with family and friends are strong, and many stay in the region because they are happy there (Bennett, 2008).

Appalachian Stereotypes

Denham (2016) warned that stereotypes that were first widely spread in the late 1800s are still prevalent today, and that care needs to be taken to reexamine not only the more flagrant, Appalachian-as-hillbilly, tropes, but also more subtle beliefs about intelligence, government assistance, and physical and mental health. Cummings-Lilly and Forrest-Bank (2019) stated, "it remains socially acceptable to deride and make fun of Appalachian people," (p. 127). Common stereotypes were perpetuated recently in the popular book, *Hillbilly Elegy,* by J.D. Vance, published in 2016. Mullins and Mullins (2021) explained Vance presented his specific experience growing up Appalachian as an accurate depiction of Appalachian culture in general. Citizens were portrayed as lazy, drug-addicted, uneducated, and violent. Vance depicted himself as one who escaped this life by hard work and intense focus, implying that other impoverished Appalachians could do the same if they wanted to (Mullins & Mullins, 2021). Although rural Appalachians face significant challenges, not all Appalachians live in the mountains, are poor, uneducated, or unaware of current cultural United States trends. Young people that do decide to leave must continually work to, "shed the skin of the stereotypes that follow them wherever they go," (Cleveland et al., 2012, p. 37). A study conducted by Dunstan and Jaeger (2016) indicated that university students from southern rural Appalachia are subject to discrimination due to their

accents. Community college students from West Virginia described enduring jokes about having all of their teeth, incest, lack of intelligence, and accents (Cummings-Lilly & Forrest-Bank, 2019). This treatment discourages young people from seeking an education or employment outside of their hometown, which restricts their options (Bennett, 2008). The stereotypes also result in problems in the region being viewed as especially difficult to solve (Gibbons et al., 2019).

Poverty

Rural Appalachian Poverty

The United States Department of Agriculture (USDA) (2018) reported high levels of rural poverty in the United States South and Southwest, stating, "persistent poverty tends to be a rural county phenomenon that is often tied to physical isolation, exploitation of resources, and limited assets and economic opportunities," (para. 8). Poverty in rural Appalachia has been well-documented. Speaking about rural Appalachia, Ulrich-Schad and Duncan (2018) explained, "These places struggle with the burdensome legacy of neglect and often ruthless exploitation by the local elites, and the long-time lack of investment in essential community institutions has locked the people and the places in chronic poverty," (p. 62).

Poverty & College Education

Sommer et al. (2018) stated, "Education is one of the strongest predictors of income in the United States," (p. 119). Post-secondary education can set a student on a path out of poverty. Low-income students who wish to attend college must find ways to finance their education. While financial aid may cover the costs, the ripple effect of poverty creates complications that free college tuition will not necessarily overcome. How well a child from a family below the poverty line can achieve academically is affected by a variety of factors. The number of years the

child has experienced poverty, housing stability, and healthcare are factors in the results (Miller, 2019; Rothstein, 2004). The anxiety of living a life of poverty greatly reduces the chances of a student succeeding in a post-secondary school (Hughes & Tucker, 2018). "Schools must, therefore, be responsive, creative, and persistent in their efforts to involve and support poor families as a whole," (Burney & Beilke, 2008, p. 311).

Community College

Cohen and Brawer (2008) defined community college as, "any institution regionally accredited to award the associate in arts or the associate in science as its highest degree," (p. 5), and Gordan and Schultz (2020) stated, "Community and technical colleges are a uniquely American model of postsecondary education and have long played an important role in career and technical education at both the secondary and postsecondary levels," (p. 135). One of the goals of the modern community college is to provide educational opportunities to students who are disadvantaged socially and economically so that they will be more competitive in the United States job market (Van Noy & Jacobs, 2012). Students in community colleges are more likely to have low-income parents who did not attend college than university students. They tend to represent a wide range of ages and most also work, many full-time, while taking classes. Community colleges also enroll a large proportion of Hispanic and African-American students (Ma & Baum, 2016). The low tuition, lenient admissions policies, and flexible schedules cater to these students as well as those who are simply looking to save money, feel they need a transitional institution between high school and a 4-year university, or desire to stay closer to home (Schudde & Goldrick-Rab, 2015). Crookston and Hooks (2012) indicated that two-year colleges that were supported by the surrounding community played a vital role in improving local employment and economic deficits. Fong et al. (2018) stated, "As open institutions,

community colleges are considered postsecondary institutions that democratize higher education, representing the inclusive culture of learning and attracting students who are often underserved by other institutions" (p. 370).

Community College History

As the Industrial Revolution progressed through the late 1800's, skilled labor became a crucial need for the United States. Public training schools developed, offering vocational training as well as traditional college courses in some cases. During the same time period, a greater number of young people were planning on attending college and wanted better preparation from their high school courses (Gordan & Schultz, 2020). Cohen and Brawer (2008) explained educational leaders suggested adding core college courses to high schools for college-bound students so that once they entered university, they would be at third-year level. In 1892, the University of Chicago president, William Rainey Harper, developed this idea into a separate junior college which soon created an associate's degree for its graduates (Witt et al., 1994). By the 1920's, many states had followed this model and had created government guidance and funding for multiple junior colleges, ending the need for extending high school for college-preparatory courses (Gordan & Schultz, 2020).

Gordan and Schultz (2020) explained from the beginning, junior college allowed for either terminal degrees that provided vocational training or the foundation needed to successfully transfer to a four-year university. The affordable courses offered during evenings became an avenue to employment for people out of work or underemployed during the Great Depression. President Roosevelt's New Deal provided further funding for more colleges (Witt et al., 1994). As the schools continued to increase in number during the 1930's and 40's, the term "community

college" began to be used, as the schools were seen as a way to educate adults of all ages (Gordan & Schultz, 2020).

Following the end of World War II, the GI Bill provided the tuition money needed for thousands of veterans to enroll in college, with the majority choosing community college. In 1946, the Truman Commission Report provided guidance to synthesize procedures and structure for community colleges throughout the nation (Witt et al., 1994). The American Association of Junior Colleges was also a source for providing guidance in organizing and governing the colleges (Gordan & Schultz, 2020). Junior colleges continued to grow steadily in number and enrollment until the 1960's when the growth became exponential and reached its highest enrollment since the inception of junior colleges in 1892 of over 4 million in 1975 (Witt et al., 1994). Colleges began looking for new methods to attract students once enrollment began to drop beginning in the 1980s. More flexible programs for nontraditional students, an increased focus to attract foreign students, and a larger number ways to acquire federal funds for education have kept community colleges successful and an attractive, affordable option for many (Cohen & Brawer, 2008).

Community colleges continue to operate under the vocational and university preparatory models that were present at their conception. Admission requirements are usually few and easy to navigate. To accommodate students with jobs, courses are offered during evening hours. Programs catering to not only job and university prep, but also community interest provide enrichment to citizens. Also, high school students can often take courses for college credit (Pierce, 2017). Current and future difficulties for community colleges include, "funding, shifts in student enrollment, and development of future community college leaders," (Gordon & Schultz, 2020, p.146).

Community College Appeal

The most common reasons high school students chose a community college are affordability, open admissions policies, flexibility in scheduling, smaller campuses, easier transition from high school, and post-degree goals (employment or four-year university enrollment). Some students feel unprepared for university academics or living far from home. Others do not have the financial means for a four-year school, especially with the added expense of room and board. The generally smaller community college environment allows students to foster relationships with professors, classmates, and mentors that help smooth the adjustment to college courses. Some students use community college as a way to eventually enroll in the university of their choice that they were not qualified to enter as freshmen (Ortagus & Hu, 2019).

Community College Outcomes

The likelihood of a community college student achieving an associate's degree is statistically unlikely. Ma and Baum (2016) stated, "Although community colleges provide easy access for students, the majority of students in this sector do not complete a credential, and completion rates have been stagnant," (p. 21). Some that successfully achieve their associate's degree face discrimination from potential employers. Van Noy and Jacobs (2012) reported that associates degrees are often associated with those who did not have the skills or initiative to achieve a bachelor's degree. The value of a 2-year degree is questioned when so many of the job-seeking population possess a 4-year degree.

Jenkins and Fink (2016) reported that while it is the intention of the vast majority of high school students entering community college to eventually transfer to a university and achieve a four-year degree, most do not meet this goal. Graduation rates for bachelor's degrees earned by students starting out in community colleges are lower than those who directly enter a university

(Monaghan & Attewell, 2015). Contributing factors to this include admission of academically unprepared students, struggles of first-generation students, financial difficulties, and deficits in transferable course credits. These factors are high predictors of drop-out rates for all types of colleges, but are especially common to community college students (Goldrick-Rab, 2010).

Because community colleges do not have strict academic requirements for admission, students tend to have lower academic credentials than those starting 4-year universities. More are required to enroll in remedial classes for English and math (Bailey et al., 2010; Ma & Baum, 2016). DeNicco et al. (2015) reported deficiencies in math and English are strong predictors that community college students will drop out after the first year. A student's need for developmental courses might indicate they are not capable of college-level work. Additionally, developmental courses contribute to the phenomenon of students with fewer credits dropping out, as these courses do not count for credit. Even those that are academically prepared often become frustrated with missteps made due to a lack of guidance. College personnel make assumptions about what college students know concerning navigating financial aid, class schedules, and transfer decisions. Because their family members probably did not attend college, community college students are less likely to have previous knowledge to such procedures. They also face difficulty in managing the freedom to decide when and how to take notes, study, and complete assignments (Karp & Bork, 2014).

When students are the first generation in their family to attend college, they are less likely to finish (Ma and Baum, 2016). Pratt et al. (2019) found that first generation college students (FGCS) frequently need to work to support their studies. Not only does this cause a decline in academic performance, it also results in a disconnect between students and their classmates, which reduces social motivation to stay in school. Due to the likelihood of not having a parent

who can prepare them for or relate to them about the college experience, they also are more likely to feel culturally out-of-place compared to students whose parents went to college. In addition, these first-generation college students may feel guilty for leaving family behind or not having time to contribute to the needs of the family. Pratt et al. (2019) stated:

> Education offers the privileged status that many FGCS have both envied and feared their entire lives. It is, after all, the same status that (a) continues to add challenge to the lives of their family and close others and (b) has made them feel different, and possibly inferior, since they were young. (p. 115)

Of the major risk factors for dropping out of college, economic issues have been found to be the largest (Pratt et al., 2019). Community college students have been found to simply drop out if the financial burden becomes too high rather than take out student loans (Ma & Baum, 2016). Also, being financially disadvantaged is closely tied to the other risk factors. First-generation students tend to come from lower income families, and economic struggles often require students to work while in school. For many students, time needed to be spent on college studies is taken up by jobs. Ma and Baum (2016) found that, "more than two-thirds of community college students worked; one-third worked full time," (p. 10), which was double the rate of university students. Even though tuition is low and financial aid often completely covers it, disadvantaged students still struggle to pay for books, transportation, and general living expenses. Those who do not receive financial help form their families are more likely to drop out (Ma & Baum, 2016; Pratt et al., 2019).

Community colleges are pressured to increase enrollment and keep tuition affordable. The result of this can be underfunded, disorganized programs that are confusing for students (Bailey et al., 2015). Without proper guidance, it is common for students who transition to a

university to find that many of their courses would not transfer. "This widespread loss of credits associated with transfer from a community college to a four-year institution is consequential: Students who lose credits have lowered chances of graduation," (Monaghan & Attewell, 2015, p. 83). In addition to being behind in credits due to nontransferable courses, community college students who have transferred into a university tend to take fewer courses per semester than those who began at the university as freshman. This slower accumulation of credits is a factor in some students not finishing their bachelor's degree (Monaghan & Attewell, 2015). However, Maliszewski and Hayes (2020) found that a well-organized system of professor and counselor involvement improved the decisions of students to choose courses that would meet their ultimate educational goals.

Tennessee Community Colleges

Tennessee established plans to create its first three community colleges in 1965 in Columbia (opened fall, 1966), Cleveland (opened fall, 1967), and Jackson (opened fall, 1967). Some current community colleges began as technical colleges. By the mid-1980's, the current group of thirteen community colleges was set (Lester, 2018). These are: Chattanooga State, Cleveland State, Columbia State, Dyersburg State, Jackson State, Motlow State, Nashville State, Northeast State, Pellissippi State, Roane State, Southwest State, Volunteer State, and Walters State (Tennessee Board of Regents (TBR), n.d.-a). Upon its establishment in 1972, the Tennessee Board of Regents began to oversee the community college system under the umbrella of the Tennessee Higher Education Committee (TBR, n.d.-c; THEC, 2022a).

Enrollment in Tennessee's community colleges has declined consistently in the years 2011 (96,779 enrolled) to 2021 (74,543 enrolled). Just over half of the students entering in the fall of 2021 continued into their sophomore year, which has been the case since 2011. The

graduation rate for those entering in the fall of 2015 was 34%, which is part of an upward trend since fall of 2005. Sixteen percent of these graduates went on to graduate with a bachelor's degree from a Tennessee University. Of first-time freshman arriving in 2021, 54% required remedial coursework, and just over half were Pell-Grant eligible. Fifty percent of enrolled students were full-time, and just under one-third were adults. The average annual cost to attend a Tennessee community college during the 2019-2020 school year was $12,553 (THEC, 2022a).

Multiple studies have shown the national attainment rate for associate's degrees are low, and Tennessee results mirror this (Fike & Fike, 2008; Ma & Baum, 2016; THEC, 2022a). As a way to address this and other postsecondary issues in Tennessee, Governor Bill Haslam launched the Drive to 55 legislation with a goal of 55% of Tennessee citizens holding a college degree or certificate by the year 2025 (Drive to 55 Alliance, n.d.; Meehan & Kent, 2020). In addition to tuition assistance via the Tennessee Promise (for traditional students) and Tennessee Reconnect (for adult students) scholarships, Drive to 55 also generated supports such as College for TN, the Tennessee Transfer Pathways system, and use of community college success organizations such as Achieving the Dream (Achieving the Dream, 2023a; Meehan & Kent, 2020; TBR, n.d.-b). An earlier initiative stipulated by the Complete College Tennessee Act in 2010 required two- and four-year colleges to meet minimum student success goals to receive 85% of their government funding (Meehan & Kent, 2020).

Students who need guidance choosing a college, course of study, or career can benefit from the website provided by College for TN. Resources for students include career interest inventories, college budget assistance, help with finding the right college, and a thorough guide to financial aid. Schools are provided schedules for in-person events, help with transcripts, and instructions for assisting students with financial aid (THEC, n.d.-b).

Monaghan and Attewell (2015) found that rejection of community college credits by four-year universities was a major factor in students giving up their attempt at a bachelor's degree. As a way to combat this, the Tennessee Transfer Pathways is a system used by Tennessee community college to guarantee classes taken will fulfill the requirements to earn an associate's degree and will also be accepted by Tennessee universities. The system provides clearly laid out descriptions of courses and sequences needed to achieve academic goals. Counselors are provided to further assist and guide the students through their plans (TBR, n.d.-b).

Another strategy for improvement by 12 out of 13 of Tennessee's community colleges is partnering with Achieving the Dream. Achieving the Dream is a consulting firm made of educators and administrators with community college experience. Achieving the Dream provides plans tailored to individual community colleges throughout the United States (Achieving the Dream, 2023a). Research-based plans of action with hands-on guidance help colleges identify and address difficulties and meet the long-term goals set forth by the individual schools. Collaboration with other colleges is encouraged to share best practices and brainstorm ideas to improve enrollment, retention, and graduation rates. Plans focus on recruitment, retention, degree completion, equity, and academic quality (Achieving the Dream, 2023a; Achieving the Dream, 2023b).

Yearly funding for Tennessee community colleges is based on a specific formula that includes retention, completion, accumulated credit hours, dual enrollment, job placement, and successful school transfer rates. According to the Tennessee Higher Education Commission (n.d.-c), school results are compared to those of all other community colleges as well as previous years' achievements. While operational costs are guaranteed to be met, 85% of funding relies on

the result of the funding formula. A decrease in performance results in a decrease in funding. In addition, "Institutions may earn up to an additional 5.45% of funding based upon metrics such as licensure pass rates, accreditation, and success with underrepresented populations," (THEC, n.d.-c, paragraph 4).

While these policies and programs have been designed to work together to improve outcomes for Tennessee community colleges, Meehan and Kent (2020) reported some schools did not have the financial means or staff to fully implement the plans. Funding is withheld from colleges who do not produce certain results, even though that funding is what is required to make improvements. For some faculty and staff, the large number of initiatives and demands have become too much to keep up with. Despite the imperfections, "Tennessee has gained national recognition for its comprehensive and multi-pronged strategy to increase college attainment," (Meehan & Kent, 2020, p. 1).

Rural Appalachian Students and Community College

For many rural Appalachian students, community college or a two-year trade school is far more appealing than a four-year university. Morten et al. (2018) found that most would have to move a good distance away to both attend a university and procure a job related to their degree. The cost of transportation to a distant university can be or become unaffordable (McDonough et al., 2010). Over 50% of jobs held by rural citizens do not require more than two years of post-secondary education (Young, 2013). Community college is a way for these students to begin their college journey and have time to adjust and make decisions about careers or continuation to a bachelor's degree. Because they are smaller, these local colleges often provide a more nurturing atmosphere with individualized guidance (Hlinka, 2017).

Financial Aid

Genesis of Government Financial Aid

Cobban (2002) explained from medieval times, students have been provided aid to attend college based on need and merit by wealthy benefactors who believed in educating the academically promising poor. Assistance was given both to students directly and to the universities to dispense as they saw fit. Some funds had no ties, while others required services in exchange. These methods were adopted by universities in America (Cobban, 2002). The practice of student loans began at Harvard in 1838 and soon spread to other institutions (Cohen & Kisker, 2009).

Because of the Industrial Revolution from the mid-18th century to the mid-19th century, the purpose of university study changed from a classical education in the humanities to more practical studies in the sciences needed to keep industry moving forward (Cohen & Kisker, 2009). Colleges and universities decided that evidence of scientific aptitude was needed to ensure students could handle the scientific challenges in this new age of education (Fuller, 2014). Drawing from experience from the military and psychology, Henry Chauncey and Carl Brigham were commissioned by Harvard University in 1934 to develop an admissions test. The result was the Scholastic Aptitude Test (S.A.T.) (Lemann, 2000). Students across the country began to be awarded admission and aid based on not only need, but also academic promise (Fuller, 2014).

Until the Servicemen's Readjustment Act of 1944 (the G.I. Bill), collegiate aid was given mostly by philanthropists and universities. Higher education assistance to military personnel was the beginning of the United States government being the primary source of higher education funding and opening up the opportunity of a college education to a larger portion of the

population. It also shifted the recipients of financial aid money from colleges to the students themselves (Fuller, 2014).

The establishment of government student loans such as the Perkins Student Loan (1958), the Stafford Loan (1972), and the Pell Grant (1980) followed the G. I. Bill (Archibald, 2002; Fuller, 2014; Gladieux & Hauptman, 2011). Federally funded work study has been available since 1964 and allows students with financial need (determined by FAFSA) to work on-campus jobs to earn money paid directly to the student (College Board, 2023-b; Scott-Clayton, 2011). For Tennessee students, the Tennessee Hope Scholarship, established in 2004, offers up to $1600 per semester for community college, $2250 per semester for freshman and sophomores at four-year schools, and $2850 for junior and senior university students. It is awarded to students with a minimum 21 ACT score and 3.0 GPA (College Pays, n.d.).

United States College Promise Programs

College promise programs are relatively new forms of government assistance designed to provide funding to students beyond traditional government grants and scholarships. Michigan led the way in the college promise program movement with Kalamazoo Promise in 2005. Free tuition was offered to Kalamazoo, Michigan students for both two- and four-year public institutions of higher learning (Andrews et al., 2010). A few other states and cities (Oregon, Delaware, Pittsburg, Ventura, and Chicago) followed with their own variations of a "free" college program. Since the start of Tennessee Promise in 2015, the number of promise programs has grown substantially (Mishory, 2018). According to College Promise (n.d.), as of July, 2022, "Thirty states have adopted legislation or executive orders to put statewide Promise programs in place. Concomitantly, College Promise identified approximately 104 community college and

university programs offered across 45 states," (p. 6). Millett et al. (2018) reported, "Promise programs are among the fastest growing trends in education," (p. 1).

Criteria to qualify for this community college expenses aid varies from program to program. Millett et al. (2018) reported most required a student be a resident of a specific place (the state, city, or district of the college) and have a high school diploma. Other requirements were based on either academic criterion, financial need, or both. A very small number of programs required neither minimum academic achievement nor financial need. A few looked at high school discipline records, and a number required community service. Most promise programs required a minimum GPA and completed credit hours for college courses to keep the aid for the following term. Community colleges were commonly found to provide formal guidance to promise program recipients (Millett et al., 2018).

Tennessee-Specific Financial Aid and Guidance

Besides federal financial aid, Tennessee students have access to scholarships and grants specific to state residents. The Tennessee Student Assistance Corporation (TSAC) oversees the operation of a number of programs such as Tennessee Promise, HOPE Scholarship, General Assembly Merit Scholarship, Ned McWherter Scholars Program, Aspire Award, and Tennessee Student Assistance Award. The agency works with high schools and colleges to provide guidance to students seeking financial aid (THEC, n.d.-a; THEC & TSAC, n.d.). Funded by the lottery, the HOPE Scholarship is given to graduating high school students who meet certain academic requirements. Scholarship money may be applied to Tennessee community colleges or universities, but only for courses that will count towards the student's major. Students with higher academic achievement than the minimum for the HOPE scholarship may be eligible for additional funds via the General Assembly Merit Scholarship and the Ned McWherter Scholars

Program. With a documented financial need, the Aspire Award is an amount added to the HOPE scholarship. The Tennessee Student Assistance Award Program grant is another source of assistance for economically disadvantaged students (THEC & TSAC, n.d.).

Tennessee Promise

In 2013, the state of Tennessee began an initiative titled, "Drive to 55." The goal was to see 55% of the population of Tennessee holding a two- or four-year college degree or professional certification by the year 2025 (Nguyen, 2020). As a part of this program, Tennessee Promise began in 2015 as a state-wide expansion of the Knox Achieves project that started in Knox County in 2009 and was successful in increasing graduation rates and college enrollment (Carruthers & Fox, 2016). The Tennessee lottery provides the $362.1 million needed to fund the program (Meehan et al., 2019). A "last-dollar" scholarship, it bridges the gap between tuition and fees to any public Tennessee two-year community college or trade school and government aid that has already been applied (Nguyen, 2020). Tennessee Promise can be used at an approved four-year Tennessee public or private university if the student is enrolled in an associate's degree program. However, the award is limited to the average tuition charge of a Tennessee community college (THEC, n.d.-d). Starting with 2015 high school graduates, the scholarship is available to those who have completed an application and the FAFSA, met with a mentor, and logged at least eight hours of community service (Nguyen, 2020; THEC, n.d.-d). The scholarship is not based on any academic achievement or economic need (Carruthers & Fox, 2016). After beginning at a post-secondary school, the students must continue filing the FAFSA each year, complete eight hours of community service per semester, be enrolled full-time (at least 12 hours), and maintain a grade point average of 2.0. As long as these conditions are met, students may receive aid from Tennessee Promise for up to five semesters (THEC, n.d.-d).

Tennessee Promise Components

Nguyen (2020) explained that one of the unique features of Tennessee Promise compared to other state scholarship programs is that there are no academic or income requirements, nor is there a limit to the number of students that can receive aid. As long as the proper forms are filled out and mentoring and community service obligations met, any Tennessee high school senior will be given the scholarship. The Tennessee Promise website provides a student checklist of important deadlines with links to required paperwork. The list has only five items for paperwork, meetings, and community service, making it more manageable for students (THEC, n.d.-d).

Students often have difficulty navigating information and procedures related to applying for college admittance and financial aid. The mentor requirement of Tennessee Promise handles the distribution of information and guides students through the entire process (Carruthers & Fox, 2016; Nguyen, 2020). Mentors are volunteers at least 21 years of age who are trained to assist high school seniors and are assigned 5-10 students with an expectation of spending 10-15 hours working with them. The requirements for mentors are designed to make the entire process as stress free as possible as well as fostering a personal relationship to encourage the student and their parents (THEC, n.d.-d). Carruthers and Fox (2016) noted that mentors could help not only in getting students to institutions that use Tennessee Promise, but also with navigating the college enrollment journey to any post-secondary school. Nguyen (2020) cited minimal requirements combined with mentoring as the key to the program's success thus far.

To help high school students navigate the Tennessee Promise scholarship requirements and college enrollment, tnAchieves provides comprehensive guidance to high school Promise program students though general information, checklists, FAFSA assistance, guidance counselor support, community service guidelines, summer programs, and in-person mentoring. Resources

are also available for current community college Promise students (tnAchieves, 2023a; tnAchieves, 2023c). tnAchieves reported higher retention and completion rates for community colleges students using their services (tnAchieves, 2022). Eighty-seven percent of Tennessee counties are utilizing the services of tnAchieves in conjunction with Tennessee Promise (tnAchieves, 2023b).

Tennessee Promise Results

According to the Tennessee Promise Annual Report (THEC, 2022b), approximately 30% of those who start the program in high school begin studies in an approved two-year program. Of these students, approximately 50% drop out. The years since Tennessee Promise began saw an average increase of 4.56% in the number of students going straight from high school to college. Seven cohorts have entered college under Tennessee Promise since the initial class in 2015. Virtually no change has occurred in earned credits during that time. Neither the dropout rate nor the graduation rate have significantly approved (THEC, 2022b).

Meehan (2019) reported that students viewed Tennessee Promise as an aid to a more financially attainable college education. Because Tennessee Promise is a last-dollar scholarship, meaning all other financial aid must be applied first, most Promise money goes to students who are not economically disadvantaged and therefore do not qualify for other government assistance. However, the guidance provided to high school seniors in completing the FAFSA and college applications as part of Tennessee Promise procedures has resulted in an increase of lower-income students enrolling in community college. While tuition and fees are covered, the cost of books, housing, and transportation remain a barrier to some of these students.

Unintended Consequences

It is possible that Tennessee Promise has resulted in some unintended consequences for public higher education institutions. Bell (2021) reported a significant drop in in-state enrollment at Tennessee public four-year universities and a substantial increase in two-year institution enrollment since the implementation of Tennessee promise. Because Tennessee Promise provides the means for a virtually cost-free freshman and sophomore year, students who would normally attend a four-year university may have decided to spend the first two years at a community college, taking potential revenue from the universities (Bell, 2021; Perna, 2020). In addition, four-year public universities experienced a growth of out-of-state students during the same period and two-year schools increased tuition (Bell, 2021).

Because community colleges have lower graduation rates than four-year schools, Bell (2021) suggested a possible unintended consequence of Tennessee Promise could be a greater number of students who are unlikely to continue on to universities or are unprepared to be successful in a four-year school. Perna (2020) explained that community college retention and completion numbers tend to drop for programs that, like Tennessee Promise, do not have an academic requirement, as students who are not college ready are still admitted. Community colleges receiving an influx of Promise students often must add responsibilities to current staff, reducing the amount of time available to work individually with students. More students, especially those who would have attended four-year schools without Promise, result in more demands for extracurricular activities, further thinning available resources (Perna, 2020).

Perna (2020) reported the full-time enrollment status requirement of Promise scholarships puts an extra burden on economically disadvantaged students, as they often must hold jobs to help pay for transportation, books, and housing. Since Tennessee Promise only pays once all

other government aid is exhausted, low-income students often do not receive any Promise money, as they qualify for other aid. Because Promise does not have any family financial stipulations, students whose families could afford college, and do not qualify for other aid, are receiving funds that might better go to disadvantaged students to cover the extra expenses that often lead to them dropping out (Poutre & Voight, 2018).

Tennessee Promise and the Needs of Rural Appalachian Students

The funding, streamlined guidance, and mentoring provided by Tennessee Promise address several challenges faced by students in rural Appalachia. Students from rural, underfunded schools sometimes believe that college is unaffordable and have not been made aware of financial help that is available (Morton et al., 2018). Acknowledging that typical financial aid often left an amount of tuition and/or fees to be paid, Tennessee Promise was established to give all students the chance to truly afford a college education (Nguyen, 2020).

Rural students are often the children of parents who did not attend college (Morton et al., 2018). Therefore, parents in rural Appalachia cannot be expected to know from experience how to navigate the college search and application process. Just filling out the FAFSA, a necessary step for any type of federal student aid, could be a task some parents are completely unaware of or could be easily overwhelmed by. Bettinger et al. (2012) described a study in which assistance in completing the FAFSA was given to H & R Block customers who were below the poverty line. During the three-year time period studied, the children of these customers finished two years of post-secondary education at an increase of eight percent over customers who received information about educational assistance but did not receive help with the FAFSA. Tennessee Promise mentors not only assist with the FAFSA, but with guiding the student and parents through all phases of the program requirements.

McDonough et al. (2010) found that rural students are often completely unaware of the types of courses, grades, and extracurricular activities required for admittance and scholarships for four-year institutions. Over one-fourth of rural Appalachian households do not have access to the internet (Pollard & Jacobsen, 2021). Rural students tend to have fewer upper level academically rigorous courses in high school (Byun et al., 2012a). This lack of advanced classes also contributes to a lack of confidence to successfully complete college requirements (Morton et al., 2018). Byun et al. (2017) found that rural students who are part of a college readiness school program not only have a greater chance of attending a community college, but also of continuing to a bachelor's degree. Tennessee Promise provides this guidance.

Although rural Appalachian students may find local two-year programs less menacing, many still need encouragement for both confidence and rationale for attending any post-secondary school. Because rural students have often spent their entire lives in a tight-knit community, they are likely to have positive experiences with teachers and community members. These relationships can be used to increase self-esteem towards academic endeavors (Byun et al., 2012b; Chenoweth & Galliher, 2004; Lyson, 2002). The mentor component of Tennessee Promise is a built-in encouragement source that can take full advantage of the social capital already present in the lives of these students. The Tennessee Promise website states that, "An effective mentor lessens the post-secondary intimidation factor by sharing personal experiences," (THEC, n.d.-d).

Summary

Chapter 2 provided a literature review of research relevant to Tennessee Promise and community college success of rural Appalachian students. The review rested on the social capital conceptual framework. Topics in the review included: Rural Communities, Appalachia, Poverty,

Community College, Tennessee Community Colleges, Rural Appalachian Students and

Community College, Financial Aid, Tennessee Promise, and Tennessee Promise and the Needs

of Rural Appalachian Students. Chapter 3 provides a description of the study's methodology.

Chapter 4 describes the results of the study and Chapter 5 draws conclusions based on the

results.

Chapter 3. Methodology

The purpose of this study was to examine the relationship between the implementation of the Tennessee Promise scholarship program and the two-year college retention and degree completion rates of students from rural Appalachian. This study sought to identify a relationship between two-year college retention and degree completion and the availability of the Tennessee Promise program in rural Appalachian. Rural Appalachia was chosen because students in these areas are often poor and underserved (Pollard & Jacobsen, 2021). Because part of rural Appalachia is in Tennessee, an opportunity exists to explore whether educational improvements are being made in these areas as a result of Tennessee Promise. Evidence exists that two-year degrees that Tennessee funds are well-suited for rural Appalachian culture (Hlinka, 2017; Howley, 2006; Morten et al., 2018; Young, 2013). There has been little research published on the relationship of Tennessee Promise to the academic success of rural Appalachian students.

Research Questions and Null Hypotheses

The research questions and corresponding null hypotheses that guided this non-experimental, quantitative study are as follows:

Research Question 1: Is there a significant difference in retention rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?

H_01: There is no significant difference in retention rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019.

Research Question 2: Is there a significant difference in 3-year graduation rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?

$H_0 2$: There is no significant difference in 3-year graduation rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019.

Research Question 3: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation rates between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

$H_0 3$: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in 3-year graduation rates between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

Research Question 4: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise and matriculating from a county designated as rural Appalachian and students utilizing Tennessee Promise and matriculating from a county designated as rural non-Appalachian?

H_04: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between students utilizing Tennessee Promise and matriculating from a county designated as rural Appalachian and students utilizing Tennessee Promise and matriculating from a county designated as rural non-Appalachian.

Research Question 5: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

H_05: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

Research Question 6: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

H_06: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county

designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

Research Question 7: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

$H_0 7$: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian.

Research Question 8: At the participating community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

$H_0 8$: During the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian.

Research Question 9: At the participating community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation

rates between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

$H_0 9$: During the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in 3-year graduation rates between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian.

Research Question 10: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise matriculating from a county designated as urban Appalachian and students utilizing Tennessee Promise matriculating from a county designated as urban non-Appalachian?

$H_0 10$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between students utilizing Tennessee Promise matriculating from a county designated as urban Appalachian and students utilizing Tennessee Promise matriculating from a county designated as urban non-Appalachian.

Research Question 11: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?

$H_0 11$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in retention rates between

first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise.

Research Question 12: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?

$H_0 12$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise.

Research Design

Because the research questions rely on testing how measurable variables are related without manipulating any variables, a quantitative research approach, specifically the comparative design, has been chosen (McMillan & Schumacher, 2010). Comparative studies explore the relationship between two variables without regard to outside influences. Such studies are done when experimental research is not possible or not needed. Rather than searching for a causal relationship, this study tried to determine the strength of the relationship between the variables. No variable is altered or considered either dependent or independent (Green & Salkind, 2017). McMillan and Schumacher (2010) explained that a comparative study determines whether a distinction exists between sample sets given a variable of focus. They stated:

The purpose of comparative studies is to investigate the relationship of one variable to

another by examining whether the value of the dependent variable in one group is

different from the value of the dependent variable in the other group. (p. 222)

The variables, retention and graduation, between pairs of groups before Tennessee Promise and

utilizing Tennessee Promise were compared. A primary goal of a comparative study is to

determine whether the relationship between variables is strong enough to make predictions about

future outcomes given the same conditions (Tuckman & Harper, 2012).

Population and Sample

The population of my study consisted of 49,774 first-time, full-time students from

Tennessee enrolled in seven Tennessee community colleges from the years 2010-2019. Students

were subdivided according to their counties of origin into the designations of rural non-

Appalachian, rural Appalachian, urban non-Appalachian, and urban Appalachian. Appalachian

counties were identified by the Appalachian Regional Commission (n.d.-a). Rural and urban

were defined by the United States Census Bureau (n.d.). Rural was further subdivided by the

National Center for Education Statistics (n.d.) into the subcategories fringe, distant, and remote,

with a range of locations from, "less than or equal to 5 miles from an urbanized area, as well as

rural territory that is less than or equal to 2.5 miles from an urban cluster," to, "more than 25

miles from an urbanized area and also more than 10 miles from an urban cluster," (NCES, n.d.,

para. 3). For the purpose this study, rural counties were those with a population that is greater

than 50% rural as designated by the United States Census Bureau (n.d.). Counties that fall

economically in the lowest 10% of the nation were identified by the Appalachian Regional

Commission (n.d.-b) as distressed, and the lowest 10-25% as at-risk. The list of Tennessee

Appalachian counties was cross referenced with the 78 rural Tennessee counties which resulted

in 42 counties designated as both rural and Appalachian. Seventeen counties were urban, with

ten being both urban and Appalachian (TNECD, 2019; Tennessee State Government, n.d.;

Transparent Tennessee, n.d.). Figure 1 is a map of Tennessee divided into counties. Economic,

population, and regional designations are indicated by number. Complete lists of counties by

designations appear in the Appendix.

Figure 1

Tennessee County Economic, Population, and Regional Designations
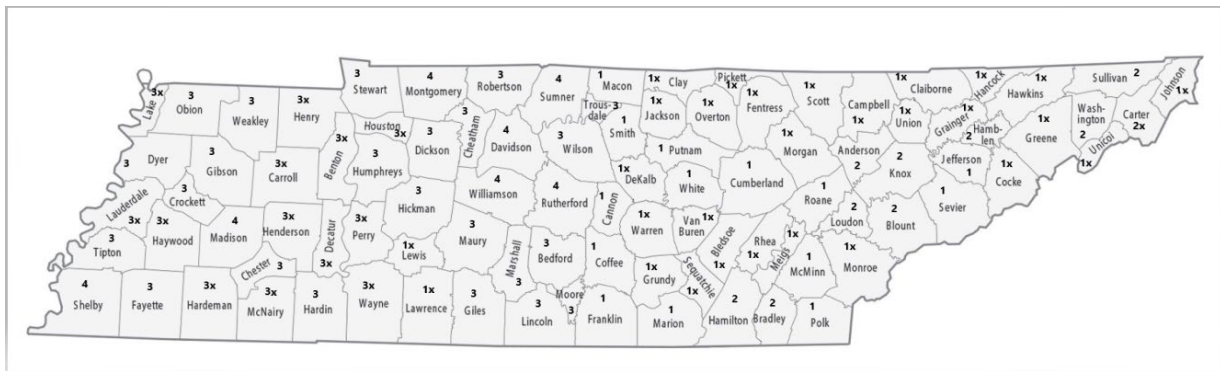
Note: Number designations: 1) Rural Appalachian; 2) Urban Appalachian; 3) Rural non-

Appalachian; 4) Urban non-Appalachian. An x indicates economically distressed or at-risk.

Adapted from *Tennessee County Map,* by GISGeography, 2022

(https://gisgeography.com/tennessee-county-map/).

Tennessee community colleges that were a part of my study were: Chattanooga State

(Hamilton County), Cleveland State (Bradley County); Dyersburg State (Dyer County), Motlow

State (Moore County), Northeast State (Sullivan County) Pellissippi State (Knox County), and

Walters State (Hamblen County) (TBR, n.d.-a; Tennessee State Government, n.d.). Figure 2 is a

map of Tennessee divided into counties. The county locations of the Tennessee community

colleges in my study are labeled.

Figure 2

Tennessee Community Colleges in Study

Note: Number designations: 1) Chattanooga State; 2) Cleveland State; 3) Dyersburg State; 4) Motlow State; 5) Northeast State; 6) Pellissippi State; 7) Walters State. Adapted from *Tennessee County Map,* by GISGeography, 2022 (https://gisgeography.com/tennessee-county-map/).

The focus of the sample was community college students from rural Appalachian. An underserved and economically disadvantaged population, rural Appalachia is plagued with steadily decreasing employment opportunities, an increasing drug crisis, and difficulties in obtaining post-secondary education (Ali & Saunders, 2006; Gibbons et al., 2017; McDonough et al., 2010; Scoones et al., 2022). High levels of poverty in rural Appalachia have been well-documented (USDA, 2018). Due to a lack of opportunities for extracurricular activities, advanced high school courses, and parental guidance, rural Appalachian students are at a disadvantage when competing for admittance to four-year universities (Byun et al., 2012a; Hlinka, 2017; McDonough et al., 2010). Furthermore, geographic distance from universities, a cultural tendency to stay near home, and struggles with stereotypes make the notion of going far from home to college unappealing to many (Bennett, 2008; Chenoweth & Galliher, 2004; Ulrich-Schad & Duncan, 2018).

Variables and Data Collection Strategies

The Institutional Review Board (IRB) of East Tennessee State University and the IRBs of each community college in the study granted permission to conduct this study. After permission was acquired, the following data were supplied by secure email from the colleges:

- students entering community college for the first time/full time in the years 2015, 2016, 2017, 2018, 2019

- county of residence

- whether or not they re-enrolled the next fall

- whether or not they graduated with their associates degree within 3 years

- whether or not they utilized Tennessee Promise

The same data were collected for students coming from high school first time, full time and entering community college in the years 2010 – 2014, which were years before Tennessee Promise was available.

Using data collected by publicly accessible reports from the United States Census Bureau (n.d.), the Appalachian Regional Commission (n.d.-a; n.d.-b; n.d.-c), the National Center for Education Statistics (n.d.), and Tennessee State Government (n.d.), counties were given a label of rural Appalachian, urban Appalachian, rural non-Appalachian, or urban non-Appalachian.

Data Analysis

"Non-experimental research is research that lacks the manipulation of an independent variable, random assignment of participants to conditions or orders of conditions, or both – characteristics pertinent to experimental designs," (Price et al., 2015, chapter 7, para. 1). Because the data were numeric, a quantitative study was appropriate. Both descriptive statistics to

organize and summarize differences in variables and non-parametric statistics to draw conclusions about the data were used (Witte & Witte, 2017).

Data were obtained from the participating community colleges by a secure email link and was then consolidated and organized into a single Excel spreadsheet which was entered into IBM SPSS statistical software to be analyzed. To determine whether independent variables statistically related to one another, a two-way contingency table analysis using crosstabs (chi-square) was applied. The tables (one per research question) used rows and columns labeled as the different levels of each variable (one variable at two levels for the rows and one variable at two levels for the columns). The cells where the rows and columns intersected contained the frequencies. Using SPSS, a chi-square analysis was conducted to determine the statistical relationship between the variables (Greene & Salkind, 2017).

For Research Questions 2, 3, 4, 9, 10, and 12, graduation rates were addressed and for Research Questions 1, 5, 6, 7, 8, and 11, retention rates were addressed. Research Question 1 was designed to compare Tennessee student retention rates at two levels (yes or no) with implementation of Tennessee Promise at two levels (pre-Promise or Promise). Research Question 2 was designed to compare Tennessee student graduation rates at two levels (yes or no) with implementation of Tennessee Promise at two levels (pre-Promise or Promise). Research Question 3 was designed to compare graduation rates at two levels (yes or no) with students from rural Tennessee counties at two levels (Appalachian or non-Appalachian) during the years before Tennessee Promise. Research Question 4 was designed to compare graduation rates at two levels (yes or no) with students from rural Tennessee counties at two levels (Appalachian or non-Appalachian) for students utilizing Tennessee Promise. Research Question 5 was designed to compare retention rates at two levels (yes or no) with students from rural Tennessee counties at

two levels (Appalachian or non-Appalachian) during the years before Tennessee Promise. Research Question 6 was designed to compare retention rates at two levels (yes or no) with students from Tennessee rural counties at two levels (Appalachian or non-Appalachian) for students utilizing Tennessee Promise. Research Question 7 was designed to compare retention rates at two levels (yes or no) with students from Tennessee urban counties at two levels (Appalachian or non-Appalachian) during the years before Tennessee Promise. Research Question 8 was designed to compare retention rates at two levels (yes or no) with students from Tennessee urban counties at two levels (Appalachian or non-Appalachian) for students utilizing Tennessee Promise. Research Question 9 was designed to compare graduation rates at two levels (yes or no) with students from Tennessee urban counties at two levels (Appalachian or non-Appalachian) during the years before Tennessee Promise. Research Question 10 was designed to compare graduation rates at two levels (yes or no) with students from Tennessee urban counties at two levels (Appalachian or non-Appalachian) for students utilizing Tennessee Promise. Research Question 11 was designed to compare retention rates at two levels (yes or no) with Tennessee students utilizing Tennessee Promise at two levels (yes or no) during the years after Tennessee Promise. Research Question 12 was designed to compare graduation rates at two levels (yes or no) with Tennessee students utilizing Tennessee Promise at two levels (yes or no) during the years after Tennessee Promise.

Assessment of Validity and Reliability

Threats to internal validity have been addressed by having control groups (urban non-Appalachian Tennessee counties, rural non-Appalachian Tennessee counties, students not using Tennessee Promise) and large population sizes. Also, the educational outcomes of all Tennessee counties before and after Tennessee Promise were compared. Data were taken from the same

years in all counties in the study and the same counties were included for each of the years. The counties selected were grouped by similar geographic and economic characteristics.

External validity is addressed by the fact that for comparison, this study includes students from all but 4 of Tennessee's 95 counties, not just those in rural Appalachia. This study has higher external validity as no variables have been manipulated (Price et al., 2015).

Reliability is assumed because the data had been previously collected by government agencies and colleges. Therefore, the testing can be repeated using the same data and the same statistical analysis.

My study demonstrated objectivity because the sample was chosen according to similar characteristics (rural, urban, Appalachian, citizens of Tennessee) that were based on geographic traits determined by government agencies. These groups were further analyzed according to educational and economic data also collected by government agencies and colleges.

Ethical Considerations/Role of the Researcher

Because data were collected from government and community college reports that did not reveal any personal information about the sample, anonymity was guaranteed. No personal information about the students included in the study was received.

Summary

Chapter 3 provided the methodology for this quantitative study of the relationship between the implementation of Tennessee Promise and community college retention and graduation rates of rural Appalachian students. Included were the research questions, research design, population, variables and data collection, data analysis strategies, assessment of validity and reliability, and ethical considerations. Chapter 4 includes a description of the results of this

study as they pertain to the research questions and discusses emergent themes. Chapter 5

discusses the implications of the results.

Chapter 4. Results

The purpose of this study was to examine the relationship between the implementation of the Tennessee Promise scholarship program and the two-year Tennessee community college retention rates and graduation rates of Tennessee students from rural Appalachian counties. Seven of Tennessee's 13 community colleges agreed to supply data for this study via secure email. The data included whether or not first time, full-time freshmen matriculating from Tennessee during the years 2010 to 2019 were retained from the first to the second year, graduated within 3 years, and utilized Tennessee Promise. Also included was the county of residence. Counties of origin were subdivided into the designations of rural and non-Appalachian, rural and Appalachian, urban and non-Appalachian, urban and Appalachian. Appalachian counties were identified by the Appalachian Regional Commission (n.d.-a). Rural and urban were defined by the United States Census Bureau (n.d.). Table 1 gives the numbers of students in the study from each county designation.

Table 1

Number of Students by County Designation

County Designation	Number of Students
Rural Appalachian	13,430
Rural Non-Appalachian	4,086
Urban Appalachian	28,565
Urban Non-Appalachian	3,693
Total	49,774

Two-way contingency table analyses using crosstabs were conducted for all research questions. Questions 1, 5, 6, 7, 8, and 11 addressed retention and questions 2, 3, 4, 9, 10, and 12 addressed graduation.

Research Question 1

Research Question 1: Is there a significant difference in retention rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?

$H_0 1$: There is no significant difference in retention rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 had a difference in retention rates than first-time, full-time freshmen at the participating Tennessee community colleges utilizing Tennessee Promise and entering during the Tennessee Promise Scholarship period 2015 to 2019. The two variables were retention (yes or no) and Promise (pre-Promise or Promise). Students' entry period and retention were found to be significantly related. Pearson $X^2(1, N = 49,774) = 784.53$, $p < .001$, Cramer's V = .13. Therefore, the null hypothesis was rejected. The proportion of students retained during the pre-Promise period was 15,031/29,332 (51.2%) and the proportion of students utilizing Tennessee Promise and retained during the Promise period was 13,062/20,442 (63.9%). First-time, full-time freshmen from Tennessee

utilizing Tennessee Promise and entering Tennessee community colleges during the Promise period were significantly more likely to be retained than those entering during the pre-Promise period.

Figure 3

Tennessee Community College Retention Rates of Tennessee Students Pre-Tennessee Promise and Utilizing Tennessee Promise

Research Question 2

Research Question 2: Is there a significant difference in 3-year graduation rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019?
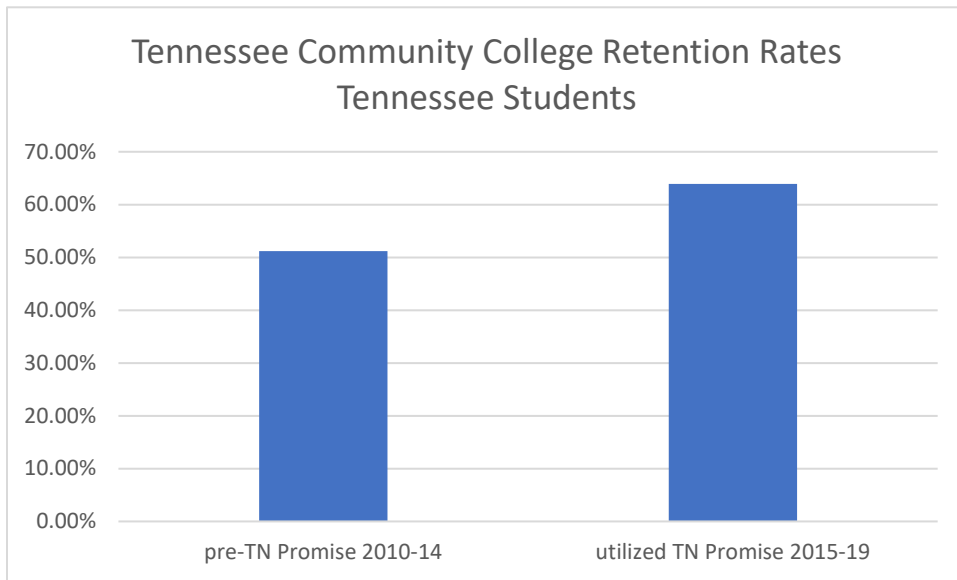
$H_0 2$: There is no significant difference in 3-year graduation rates of first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges between students

during the pre-Tennessee Promise scholarship period 2010 to 2014 and students utilizing

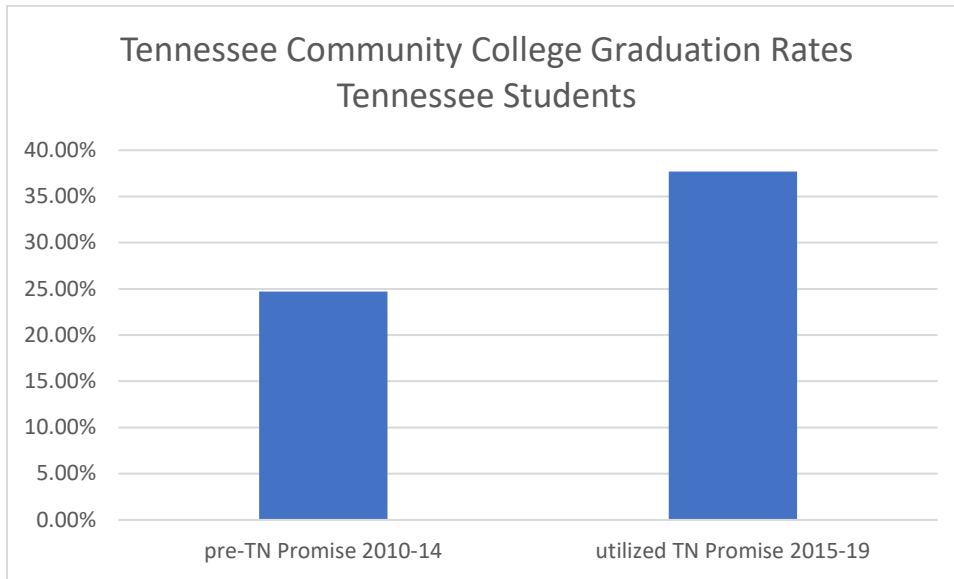Tennessee Promise during the Tennessee Promise scholarship period 2015 to 2019.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 had a difference in 3-year graduation rates than first-time, full-time freshmen from Tennessee at the participating Tennessee community colleges utilizing Tennessee Promise and entering during the Tennessee Promise Scholarship period 2015 to 2019. The two variables were graduation (yes or no) and Promise (pre-Promise or Promise). Students' entry period and graduation were found to be significantly related. Pearson X^2(1, N = 49,774) = 964.45, p < .001, Cramer's V = .14. Therefore, the null hypothesis was rejected. The proportion of students graduating during the pre-Promise period was 7,247/29,332 (24.7%) and the proportion of students utilizing Promise and graduating during the Promise period was 7,702/20,442 (37.7%). First-time, full-time freshmen from Tennessee utilizing Tennessee Promise and entering Tennessee community colleges during the Promise period were significantly more likely to graduate within 3 years than those entering during the pre-Promise period.

Figure 4

Tennessee Community College Graduation Rates of Tennessee Students Pre-TN Promise and

Utilizing TN Promise

Research Question 3

Research Question 3: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation rates between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

$H_0 3$: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in 3-year graduation rates between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether there was a difference in 3-year graduation rates between first-time, full-time freshmen at the participating Tennessee community colleges entering during the pre-Tennessee Promise

scholarship period 2010 to 2014 and matriculating from a county designated as rural Appalachian and first-time, full-time freshmen at the participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 and matriculating from a county designated as rural non-Appalachian. The two variables were graduation (yes or no) and designation (rural Appalachian or rural non-Appalachian). Students' county designation and graduation were found to be significantly related. Pearson X^2(1, N = 10,483) = 66.36, p < .001, Cramer's V = .08. Therefore, the null hypothesis was rejected. The proportion of students from counties designated as rural Appalachian graduating during the pre-Promise period was 2,244/7,892 (28.4%) and the proportion of students from counties designated as rural non-Appalachian graduating during the pre-Promise period was 526/2,591 (20.3%). First-time, full-time freshmen from counties designated as rural Appalachian entering Tennessee community colleges during the pre-Promise period were significantly more likely to graduate than those from counties designated as rural non-Appalachian.

Figure 5

Tennessee Community College Graduation Rates for Tennessee Students from Rural Appalachia and Rural Non-Appalachia During Pre-Tennessee Promise 2010-2014
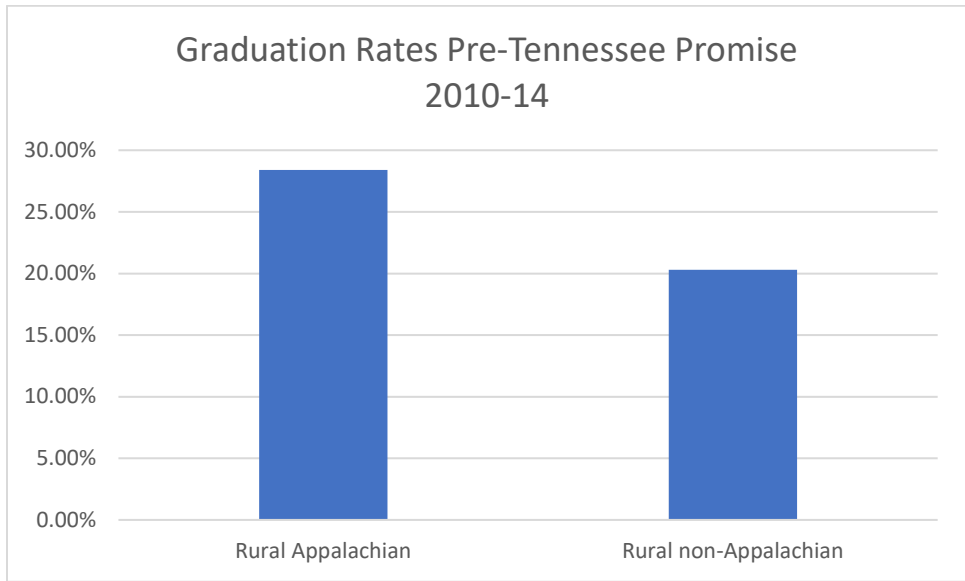

Research Question 4

Research Question 4: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise and matriculating from a county designated as rural Appalachian and students utilizing Tennessee Promise and matriculating from a county designated as rural non-Appalachian?

$H_0$4: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between students utilizing Tennessee Promise and matriculating from a county designated as rural Appalachian and students utilizing Tennessee Promise and matriculating from a county designated as rural non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether there was a difference in 3-year graduation rates between first-time, full-time freshmen utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as rural Appalachian and first-time, full-time freshmen utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as rural non-Appalachian. The two variables were graduation (yes or no) and designation (rural Appalachian or rural non-Appalachian). Students' county designation and graduation were found to be significantly related. Pearson X^2(1, N = 7,033) = 8.47, p = .004, Cramer's V = .04. Therefore, the null hypothesis was rejected. The proportion of students utilizing Tennessee Promise from counties designated as rural Appalachian graduating during the Promise period was 2,260/5,538 (40.8%) and the proportion of students utilizing Tennessee Promise from counties designated as rural non-Appalachian graduating during the Promise period was 548/1,495 (36.7%). First-time, full-time freshmen utilizing Tennessee Promise from counties designated as rural Appalachian entering Tennessee community colleges during the Promise period were significantly more likely to graduate than those utilizing Tennessee Promise from counties designated as rural non-Appalachian.

Figure 6

Tennessee Community College Graduation Rates for Tennessee Students from Rural Appalachia and Rural Non-Appalachia Utilizing Tennessee Promise 2015-2019
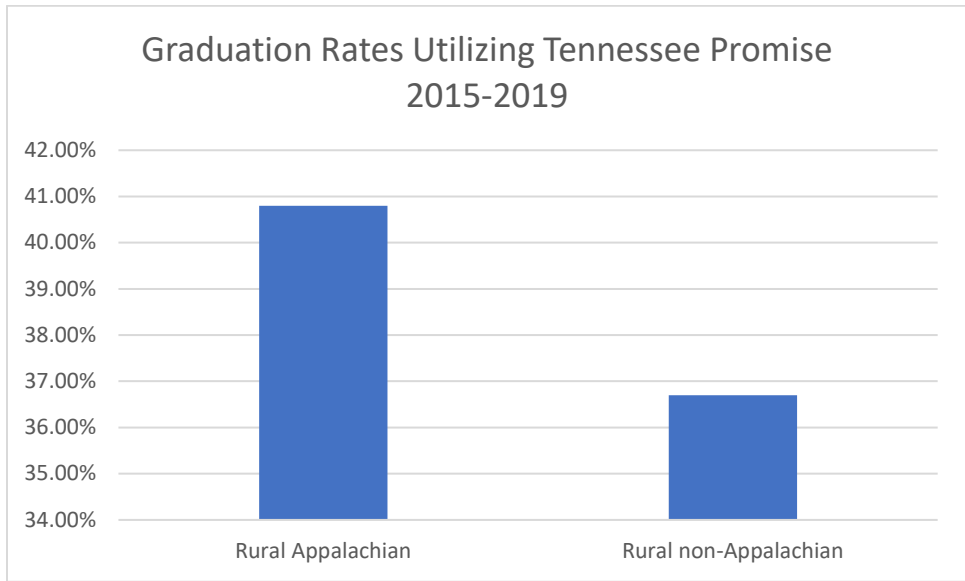

Research Question 5

Research Question 5: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

$H_0$5: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether there was a difference in retention rates between first-time, full-time freshmen at the

participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 and matriculating from a county designated as rural Appalachian and first-time, full-time freshmen at the participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 and matriculating from a county designated as rural non-Appalachian. The two variables were retention (yes or no) and designation (rural Appalachian or rural non-Appalachian). Students' county designation and retention were found to be significantly related. Pearson X^2(1, N = 10,483) = 5.56, p = .02, Cramer's V = .02. Therefore, the null hypothesis was rejected. The proportion of students from counties designated as rural Appalachian retained during the pre-Promise period was 4,011/7,892 (50.8%) and the proportion of students from counties designated as rural non-Appalachian retained during the pre-Promise period was 1,386/2,591 (53.5%). First-time, full-time freshmen from counties designated as rural non-Appalachian entering Tennessee community colleges during the pre-Promise period were significantly more likely to be retained than those from counties designated as rural Appalachian.

Figure 7

Tennessee Community College Retention Rates for Tennessee Students from Rural Appalachia and Rural Non-Appalachia During Pre-Tennessee Promise 2010-2014
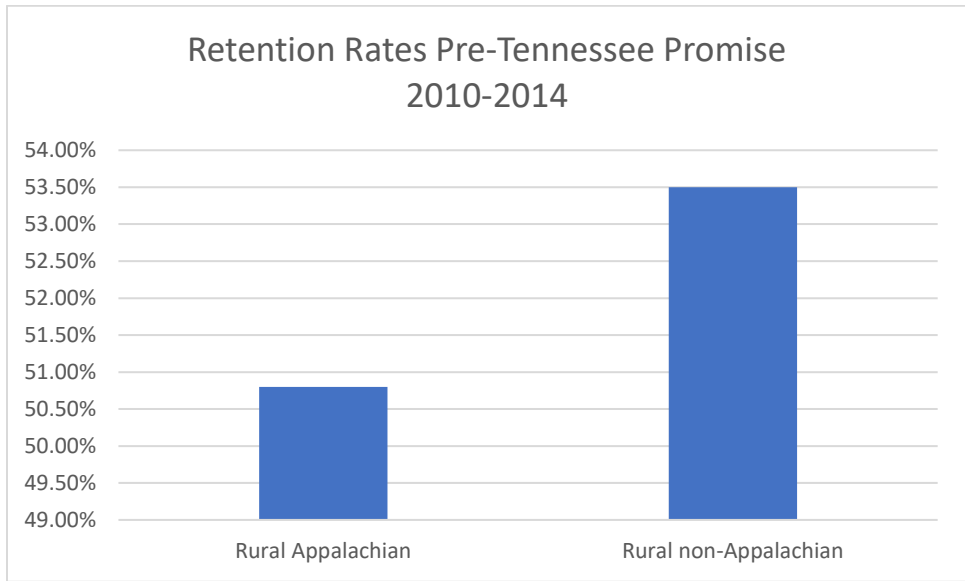
Research Question 6

Research Question 6: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian?

$H_0 6$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a county designated as rural Appalachian and students matriculating from a county designated as rural non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether there was a difference in retention rates between first-time, full-time freshmen utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as rural Appalachian and first-time, full-time freshmen utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as rural non-Appalachian. The two variables were retention (yes or no) and designation (rural Appalachian or rural non-Appalachian). Students' county designation and retention were found to be significantly related. Pearson X^2(1, N = 7,033) = 19.03, p < .001, Cramer's V = .05. Therefore, the null hypothesis was rejected. The proportion of students utilizing Tennessee Promise from counties designated as rural Appalachian retained during the Promise period was 3,627/5,538 (65.5%) and the proportion of students utilizing Tennessee Promise from counties designated as rural non-Appalachian retained during the Promise period was 888/1,495 (59.4%). First-time, full-time freshmen utilizing Tennessee Promise from counties designated as rural Appalachian entering Tennessee community colleges during the Promise period were significantly more likely to be retained than those from counties designated as rural non-Appalachian.

Figure 8

Tennessee Community College Retention Rates for Tennessee Students from Rural Appalachia and Rural Non-Appalachia Utilizing Tennessee Promise 2015-2019
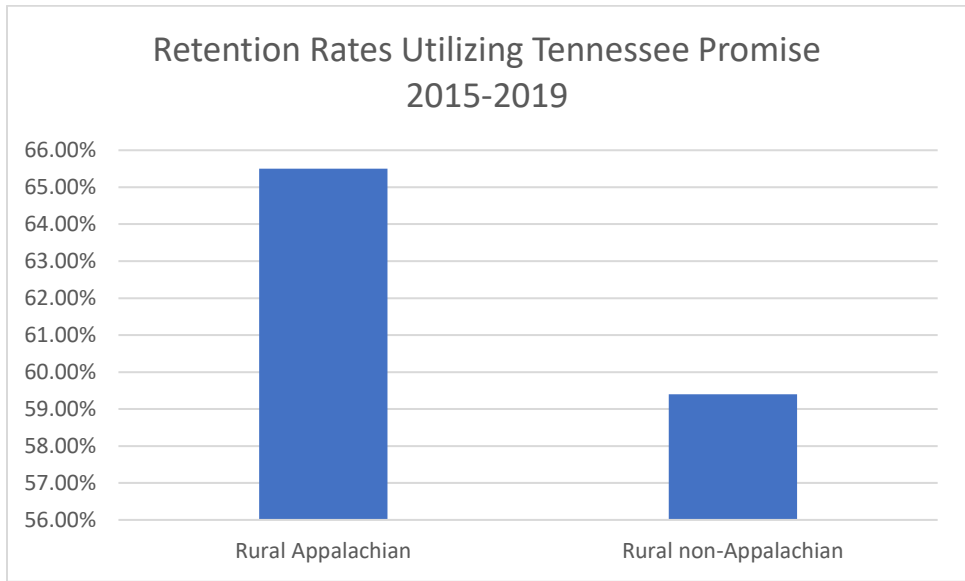

Research Question 7

Research Question 7: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

$H_0 7$: At the participating Tennessee community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in retention rates of first-time, full-time freshmen between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether there was a difference in retention rates between first-time, full-time freshmen at the

participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 and matriculating from a county designated as urban Appalachian and first-time, full-time freshmen at the participating Tennessee community colleges entering during the pre-Tennessee Promise scholarship period 2010 to 2014 and matriculating from a county designated as urban non-Appalachian. The two variables were retention (yes or no) and designation (urban Appalachian or urban non-Appalachian). Students' county designation and retention were found to be significantly related. Pearson X^2(1, N = 18,849) = 7.92, p = .005, Cramer's V = .02. Therefore, the null hypothesis was rejected. The proportion of students from counties designated as urban Appalachian retained during the pre-Promise period was 8,875/17,259 (51.4%) and the proportion of students from counties designated as urban non-Appalachian retained during the pre-Promise period was 759/1,590 (47.7%). First-time, full-time freshmen from counties designated as urban Appalachian entering Tennessee community colleges during the pre-Promise period were significantly more likely to be retained than those from counties designated as urban non-Appalachian.

Figure 9

Tennessee Community College Retention Rates for Tennessee Students from Urban Appalachia

and Urban Non-Appalachia During Pre-Tennessee Promise 2010-2014
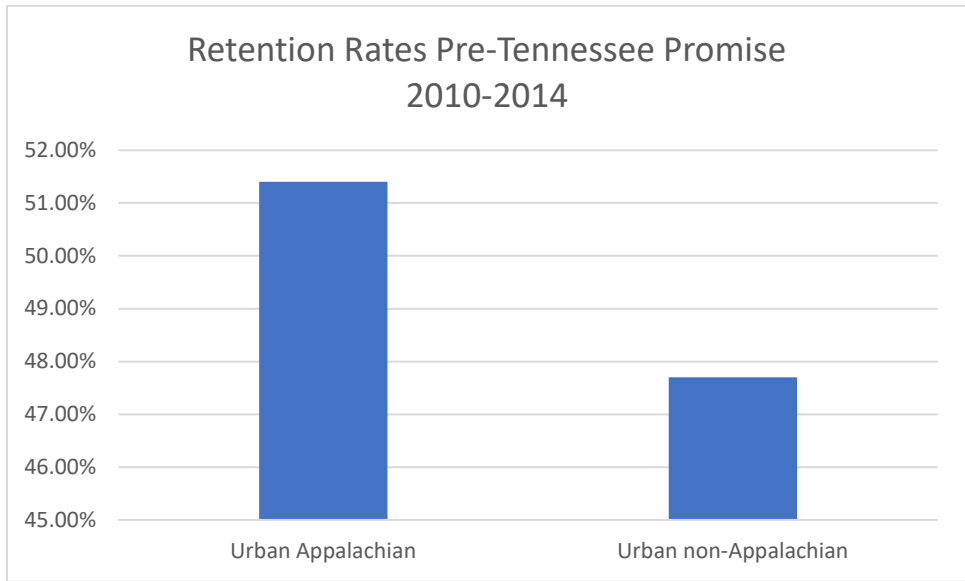
Research Question 8

Research Question 8: At the participating community colleges during the Tennessee

Promise scholarship period 2015 to 2019, is there a significant difference in retention rates of

first-time, full-time freshmen utilizing Tennessee Promise between students matriculating from a

county designated as urban Appalachian and students matriculating from a county designated as

urban non-Appalachian?

$H_0 8$: During the Tennessee Promise scholarship period 2015 to 2019, there is no

significant difference in retention rates of first-time, full-time freshmen utilizing Tennessee

Promise between students matriculating from a county designated as urban Appalachian and

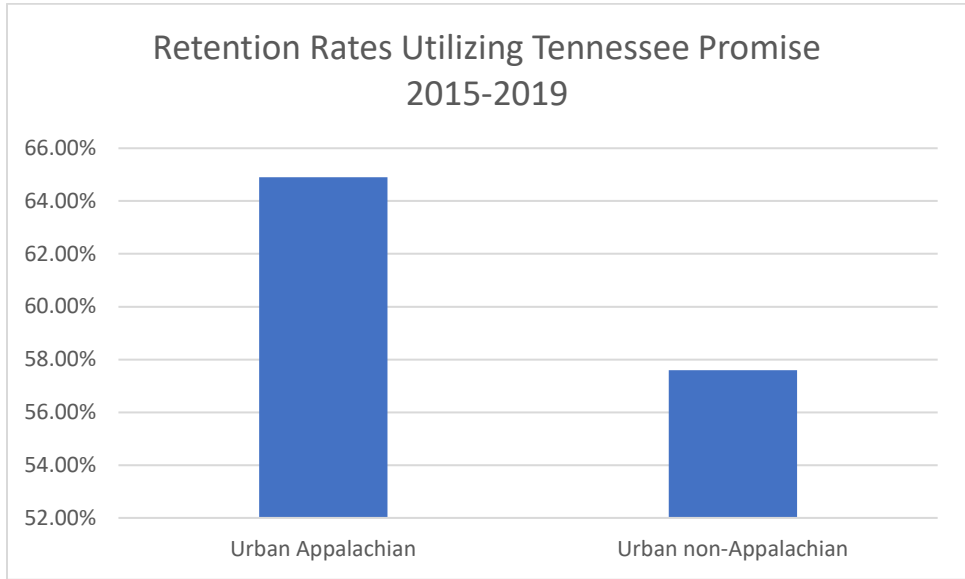students matriculating from a county designated as urban non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether

there was a difference in retention rates between first-time, full-time freshmen utilizing

Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as urban Appalachian and first-time, full-time freshmen utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 and matriculating from a county designated as urban non-Appalachian. The two variables were retention (yes or no) and designation (urban Appalachian or urban non-Appalachian). Student's county designation and retention were found to be significantly related. Pearson X^2(1, N = 13,409) = 40.27, p < .001, Cramer's V = .06. Therefore, the null hypothesis was rejected. The proportion of urban Appalachian students utilizing Tennessee Promise retained during the Promise period was 7,335/11,306 (64.9%) and the proportion of urban non-Appalachian students using Tennessee Promise retained during the Promise period was 1,212/2,103 (57.6%). First-time, full-time freshmen utilizing Tennessee Promise from counties designated as urban Appalachian entering Tennessee community colleges during the Promise period were significantly more likely to be retained than those from counties designated as urban non-Appalachian.

Figure 10

Tennessee Community College Retention Rates for Tennessee Students from Urban Appalachia and Urban Non-Appalachia Utilizing Tennessee Promise 2015-2019

Research Question 9

Research Question 9: At the participating community colleges during the pre-Tennessee Promise scholarship period 2010 to 2014, is there a significant difference in 3-year graduation rates between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian?

$H_0 9$: During the pre-Tennessee Promise scholarship period 2010 to 2014, there is no significant difference in 3-year graduation rates between students matriculating from a county designated as urban Appalachian and students matriculating from a county designated as urban non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen matriculating from counties designated as urban Appalachian at the participating Tennessee community colleges entering during the pre-Tennessee Promise

scholarship period 2010 to 2014 had a difference in 3-year graduation rates than first-time, full-time freshmen matriculating from counties designated as urban non-Appalachian at the participating Tennessee community colleges entering during the pre-Tennessee Promise Scholarship period 2010 to 2014. The two variables were graduation (yes or no) and designation (urban Appalachian or urban non-Appalachian). Students' county designation and graduation were found to be significantly related, Pearson X^2(1, N = 18,849) = 93.08, p < .001, Cramer's V = .07. Therefore, the null hypothesis was rejected. The proportion of urban Appalachian students graduating during the pre-Promise period was 4,256/17,259 (24.7%) and the proportion of urban non-Appalachian students graduating during the pre-Promise period was 221/1,590 (13.9%). First-time, full-time freshmen from urban Appalachian counties entering Tennessee community colleges during the pre-Promise period were significantly more likely to graduate within 3 years than those from urban non-Appalachian counties.

Figure 11

Tennessee Community College Graduation Rates for Tennessee Students from Urban Appalachia and Urban Non-Appalachia During Pre-Tennessee Promise 2010-2014

Research Question 10

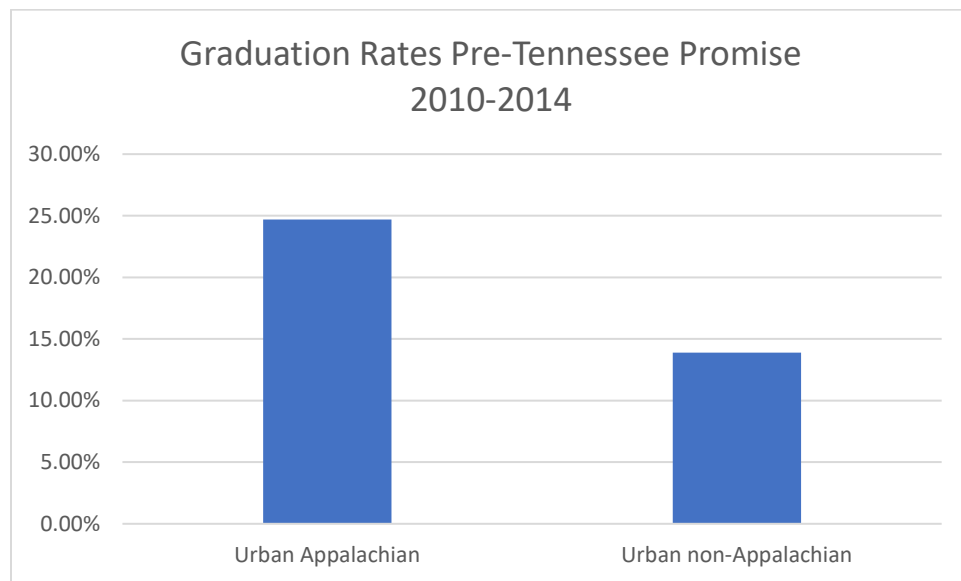Research Question 10: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between students utilizing Tennessee Promise matriculating from a county designated as urban Appalachian and students utilizing Tennessee Promise matriculating from a county designated as urban non-Appalachian?

$H_0$10: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between students utilizing Tennessee Promise matriculating from a county designated as urban Appalachian and students utilizing Tennessee Promise matriculating from a county designated as urban non-Appalachian.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen utilizing Tennessee Promise matriculating from counties designated urban Appalachian at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 had a difference in 3-year graduation rates than first-time, full-time freshmen utilizing Tennessee Promise matriculating from counties designated urban non-Appalachian at the participating Tennessee community colleges entering during the Tennessee Promise Scholarship period 2015 to 2019. The two variables were graduation (yes or no) and designation (urban Appalachian or urban non-Appalachian). Students' county designation and graduation were found to be significantly related, Pearson X^2(1, N = 13,409) = 40.21, p < .001, Cramer's V = .06. Therefore, the null hypothesis was rejected. The proportion of urban Appalachian students utilizing Tennessee Promise graduating during the Promise period was 4,255/11,306 (37.6%) and the proportion of urban non-Appalachian students

utilizing Tennessee Promise graduating during the Promise period was 639/2,103 (30.4%). First-time, full-time freshmen utilizing Tennessee Promise from urban Appalachian counties entering Tennessee community colleges during the Promise period were significantly more likely to graduate within 3 years than those utilizing Tennessee Promise from urban non-Appalachian counties.

Figure 12

Tennessee Community College Graduation Rates for Tennessee Students from Urban Appalachia and Urban Non-Appalachia Utilizing Tennessee Promise 2015-2019
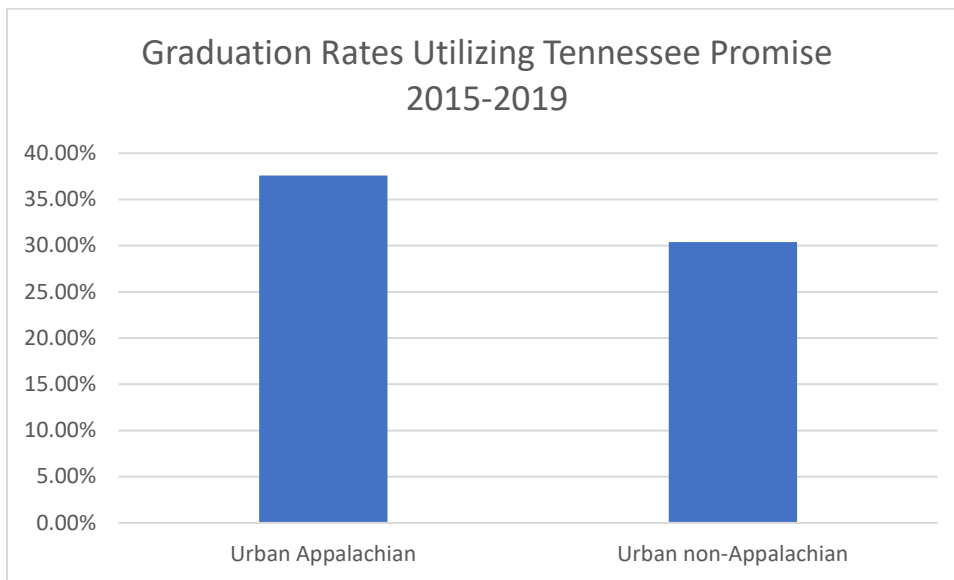

Research Question 11

Research Question 11: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in retention rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?

$H_0 11$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in retention rates between

first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen matriculating from Tennessee utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship period 2015 to 2019 had a difference in retention rates than first-time, full-time freshmen matriculating from Tennessee not utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise Scholarship period 2015 to 2019. The two variables were retention (yes or no) and Promise (Promise or non-Promise). Students' use of Promise and retention were found to be significantly related, Pearson X^2(1, N = 40,851) = 919.31, p < .001, Cramer's V = .15. Therefore, the null hypothesis was rejected. The proportion of students utilizing Promise retained during the Promise period was 13,062/20,442 (63.9%) and the proportion of students not utilizing Promise retained during the Promise period was 10,005/20,409 (49.0%). First-time, full-time freshmen from Tennessee entering Tennessee community colleges during the Promise period and utilizing Tennessee Promise were significantly more likely to be retained than those not utilizing Tennessee Promise.

Figure 13

Tennessee Community College Retention Rates for Tennessee Students Utilizing Tennessee Promise and Not Utilizing Tennessee Promise 2015-2019

Research Question 12

Research Question 12: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, is there a significant difference in 3-year graduation rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise?
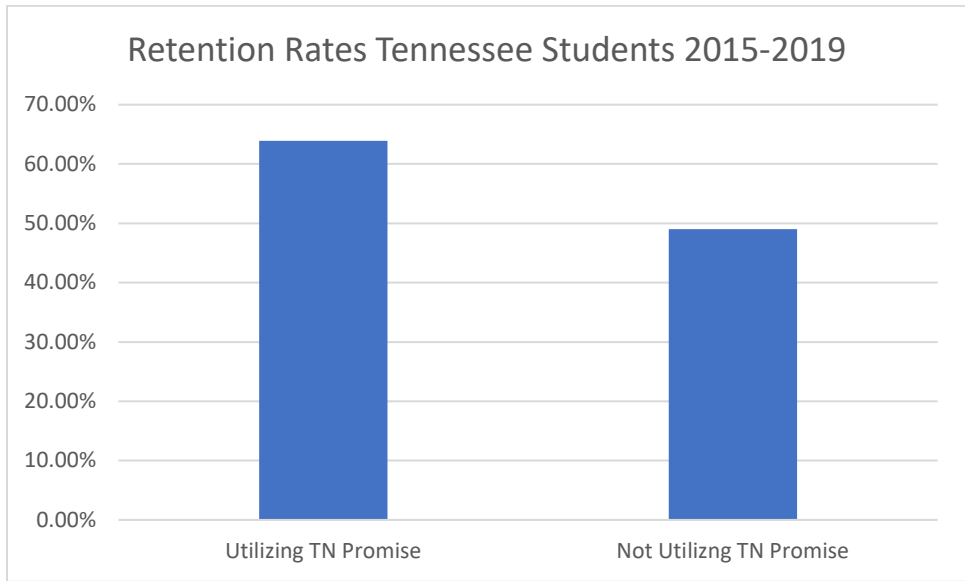
$H_0 12$: At the participating Tennessee community colleges during the Tennessee Promise scholarship period 2015 to 2019, there is no significant difference in 3-year graduation rates between first-time, full-time freshmen from Tennessee utilizing Tennessee Promise and first-time, full-time freshmen from Tennessee not utilizing Tennessee Promise.

A two-way contingency table analysis using crosstabs was conducted to evaluate whether first-time, full-time freshmen matriculating from Tennessee utilizing Tennessee Promise at the participating Tennessee community colleges entering during the Tennessee Promise scholarship

period 2015 to 2019 had a difference in 3-year graduation rates than first-time, full-time

freshmen matriculating from Tennessee not utilizing Tennessee Promise at the participating

Tennessee community colleges entering during the Tennessee Promise Scholarship period 2015

to 2019. The two variables were graduation (yes or no) and Promise (Promise or non-Promise).

Students' use of Promise and graduation were found to be significantly related, Pearson X^2(1, N

= 40,851) = 756.67, p < .001, Cramer's V = .14. Therefore, the null hypothesis was rejected. The

proportion of students utilizing Promise graduating during the Promise period was 7,702/20,442

(37.7%) and the proportion of students not utilizing Promise graduating during the Promise

period was 5,112/20,409 (25.0%). First-time, full-time freshmen from Tennessee entering

Tennessee community colleges during the Promise period and utilizing Tennessee Promise were

significantly more likely to graduate within 3 years than those not utilizing Tennessee Promise.

Figure 14

Tennessee Community College Graduation Rates for Tennessee Students Utilizing Tennessee

Promise and Not Utilizing Tennessee Promise 2015-2019
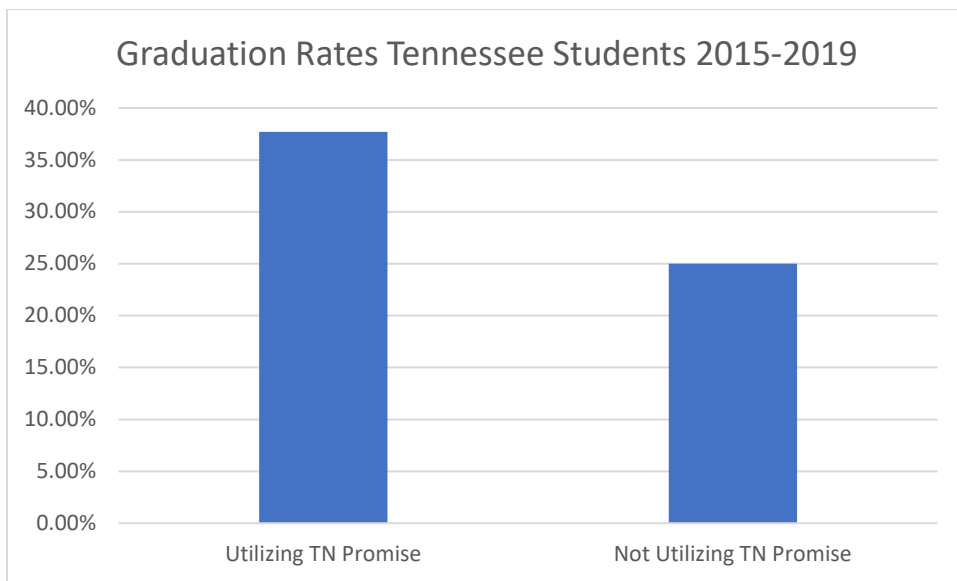
Summary

Data analysis related to the essential research question, "is there a relationship between the implementation of the Tennessee Promise scholarship program and the two-year Tennessee community college retention rates and graduation rates of Tennessee students from rural Appalachian counties?" was presented in Chapter 4. The supporting sub-questions addressed comparisons between Tennessee students before Tennessee Promise and Tennessee students who utilized Tennessee Promise, Tennessee students from rural Appalachia and Tennessee students from rural non-Appalachia, Tennessee students from urban Appalachia and Tennessee students from urban non-Appalachia, and Tennessee students who utilized Tennessee Promise and Tennessee students who did not utilize Tennessee Promise. Data was examined and categorized according to the social capital framework. The interpretation of themes which emerged in Chapter 4 is presented in Chapter 5.

Chapter 5. Conclusion

Evidence in the literature indicates that many rural Appalachian students face an uphill battle to break the cycle of poverty and receive a college education (Gibbons et al., 2017; Hlinka, 2017; Malkus, 2018; Wadsworth et al., 2008). Community colleges address several of the challenges by having open admission, lower tuition costs, a smaller environment, and being closer to home for rural students (Howley, 2006; Schudde & Goldrick-Rab, 2015). However, community colleges across the country have been struggling to improve their low achievement rates (Fike & Fike, 2008; Ma & Baum, 2016). Tennessee began the Tennessee Promise scholarship in 2015 to make community college more accessible and provide tools for greater community college success (Carruthers & Fox, 2016). According to the Tennessee Higher Education Commission (2022b), however, Tennessee Promise has not resulted in improvement in either retention or graduation rates. Very little research has been done to study the retention and graduation rates of Tennessee students from Appalachia using Tennessee Promise. This study sought to examine whether Tennessee Promise was making a significant difference in the retention and graduation rates of rural Tennessee Appalachian students. Seven of Tennessee's 13 community colleges provided retention and graduation data for first-time, full-time students for the years 2010-2019. Data included whether or not Tennessee Promise was utilized, whether or not the student was retained, whether or not the student graduated within three years, and counties of origin. Counties were categorized by the designations of rural Appalachian, rural non-Appalachian, urban Appalachian, and urban non-Appalachian (Appalachian Regional Commission, n.d.-a; TNECD, 2019; Tennessee State Government, n.d.; Transparent Tennessee, n.d.).

Summary of Findings

Each research question in this study applied two-way contingency table analysis using crosstabs to compare retention and graduation rates of first-time, full-time Tennessee community college students. Comparisons were made of students entering before Tennessee Promise 2010-2014 and utilizing Tennessee Promise 2015-2019. Retention and graduation rates were also compared between rural Appalachian and non-rural Appalachian, urban Appalachian and non-urban Appalachian, and between use of Tennessee Promise and non-use of Tennessee Promise during the Promise period 2015-2019.

Before Tennessee Promise vs. Using Tennessee Promise: Retention and Graduation Rates

All Tennessee Students

Graduation rates of all first-time, full-time freshmen from Tennessee entering the participating Tennessee community colleges were examined in research questions one and two. A comparison was made between retention and graduation rates of students attending during the pre-Promise period 2010 to 2014 and students attending and utilizing Promise during the Promise period 2015-2019. Retention rates were examined in research question one. It was determined via Chi-Square analysis that the retention rates of students using Promise during the Promise period (63.9%) were significantly higher than the retention rates of students during pre-Promise (51.2%). Graduation rates were addressed in research question two. It was determined via Chi-Square analysis that the graduation rates of students using Promise during the Promise period (37.7%) were significantly higher than the graduations rates of students during pre-Promise (24.7%).

Rural Appalachia and Rural Non-Appalachia

Graduation rates of first-time, full-time students from rural Tennessee Appalachia and rural Tennessee non-Appalachia attending the participating Tennessee community colleges were compared in research questions three and four. The pre-Tennessee Promise period 2010 to 2014 was covered in research question three. Chi-Square analysis determined that graduation rates of rural Appalachian students (28.4%) were significantly higher than graduation rates of rural non-Appalachian students (20.3%). Graduation rates of students using Tennessee Promise during the period 2015-2019 were analyzed in research question four. Chi-Square analysis determined that rural Tennessee Appalachian graduation rates (40.8%) were significantly higher than rural Tennessee non-Appalachian graduation rates (36.7%). Graduation rates of both rural Appalachian and rural non-Appalachian students rose between the pre-Promise and Promise time periods.

Figure 15

Tennessee Community College Graduation Rates Pre-Promise and Utilizing Promise: Rural
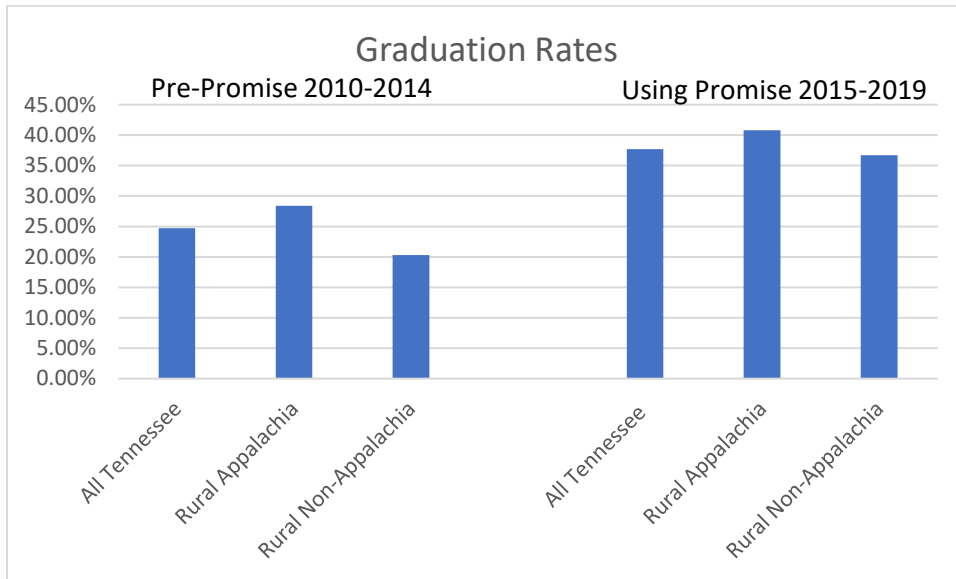
Tennessee Appalachia and Rural Tennessee Non-Appalachia

Retention rates of first-time, full-time students from rural Tennessee Appalachia and rural

Tennessee non-Appalachia attending the participating Tennessee community colleges were

examined in research questions five and six. The pre-Tennessee Promise period 2010-2014 was

analyzed in research question five. Chi-Square analysis showed rural Tennessee non-

Appalachian student retention rates (53.5%) were significantly higher than rural Tennessee

Appalachian student retention rates (50.8%). The utilization of Tennessee Promise 2015-2019

was covered by research question six. Chi-Square analysis determined rural Tennessee

Appalachian student retention rates (65.5%) were significantly higher than rural Tennessee non-

Appalachian student retention rates (59.4%). Retention rates of both rural Appalachian and rural

non-Appalachian students rose between the pre-Promise and Promise time periods.

Figure 16

Tennessee Community College Retention Rates Pre-Promise and Utilizing Promise: Rural

Tennessee Appalachia and Rural Tennessee Non-Appalachia

Urban Appalachia and Urban Non-Appalachia

Retention rates of first-time, full-time students from urban Tennessee Appalachia and urban Tennessee non-Appalachia attending the participating Tennessee community colleges were compared in research questions seven and eight. The pre-Tennessee Promise period 2010 to 2014 was covered in research question seven. Chi-Square analysis determined that retention rates of urban Appalachian students (51.4%) were significantly higher than retention rates of urban non-Appalachian students (47.7%). Retention rates of students using Tennessee Promise during the period 2015-2019 was addressed in research question eight. Chi-Square analysis determined that urban Tennessee Appalachian retention rates (64.9%) were significantly higher than urban Tennessee non-Appalachian retention rates (57.6%). Retention rates of both urban Appalachian and urban non-Appalachian students rose between the pre-Promise and Promise time periods.

Figure 17

Tennessee Community College Retention Rates Pre-Promise and Utilizing Promise: Urban

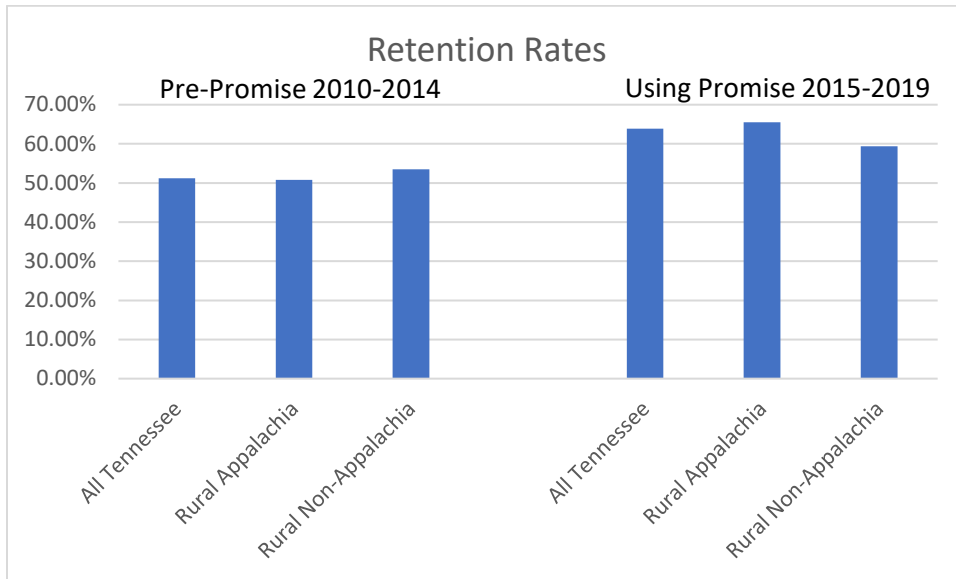*Tennessee Appalachia and Urban Tennessee Non-Appalachia*

Graduation rates of first-time, full-time students from urban Tennessee Appalachia and

urban Tennessee non-Appalachia attending the participating Tennessee community colleges

were examined in research questions nine and ten. The pre-Tennessee Promise period 2010-2014

was addressed in research question nine. Chi-Square analysis showed urban Tennessee

Appalachian student graduation rates (24.7%) were significantly higher than urban Tennessee

non-Appalachian student graduation rates (13.9%). The utilization of Tennessee Promise 2015-

2019 was covered by research question ten. Chi-Square analysis determined urban Tennessee

Appalachian student graduation rates (37.6%) were significantly higher than urban Tennessee

non-Appalachian student graduation rates (30.4%). Graduation rates of both urban Appalachian

and urban non-Appalachian students rose between the pre-Promise and Promise time periods.

Figure 18

Tennessee Community College Graduation Rates Pre-Promise and Utilizing Promise: Urban
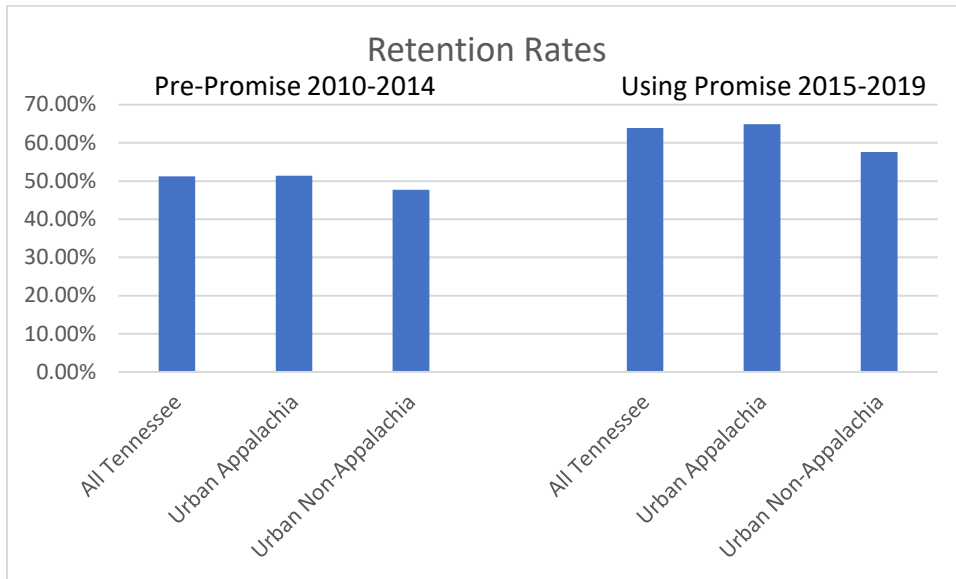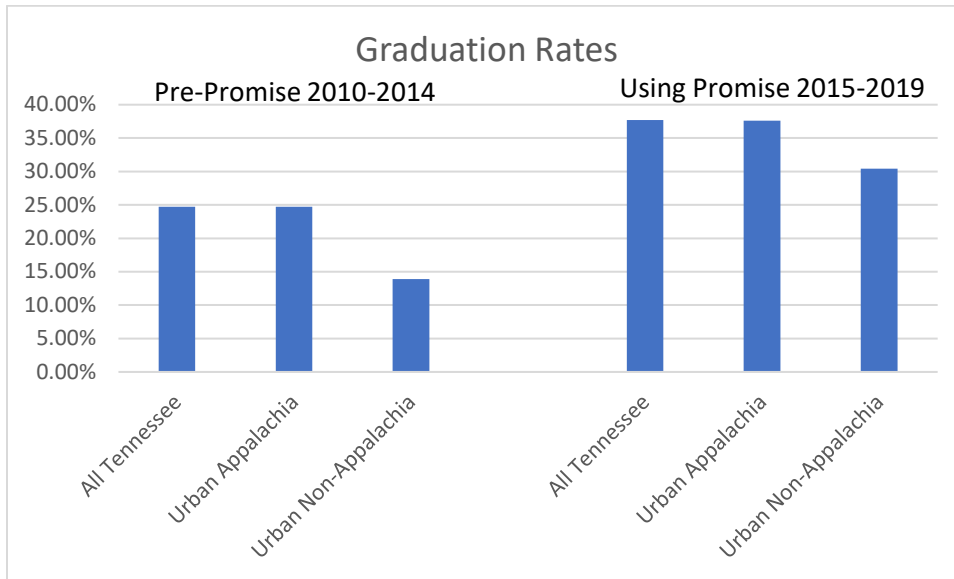
Tennessee Appalachia and Urban Tennessee Non-Appalachia

Retention and Graduation Rates During the Promise Period: Using Tennessee Promise vs.

Not Using Tennessee Promise

Retention and graduation rates of all first-time, full-time freshmen from Tennessee at the

participating Tennessee community colleges were analyzed in research questions 11 and 12. A

comparison was made between retention and graduation rates of students attending and utilizing

Promise during the Promise period 2015 to 2019 and students attending and not utilizing Promise

during the Promise period 2015-2019. Retention rates were examined in research question 11. It

was determined via Chi-Square analysis that the retention rates of students using Promise during

the Promise period (63.9%) were significantly higher than retention rates of students during not

using Promise during the Promise period (49.0%). Graduation rates were addressed in research

question 12. It was determined via Chi-Square analysis that the graduation rates of students using

Promise during the Promise period (37.7%) and was significantly higher than the graduations

rates of students not using Promise during the Promise period (25.0%).

Figure 19

Tennessee Community College Retention and Graduation Rates 2015-2019: Using Promise and

Not Using Promise
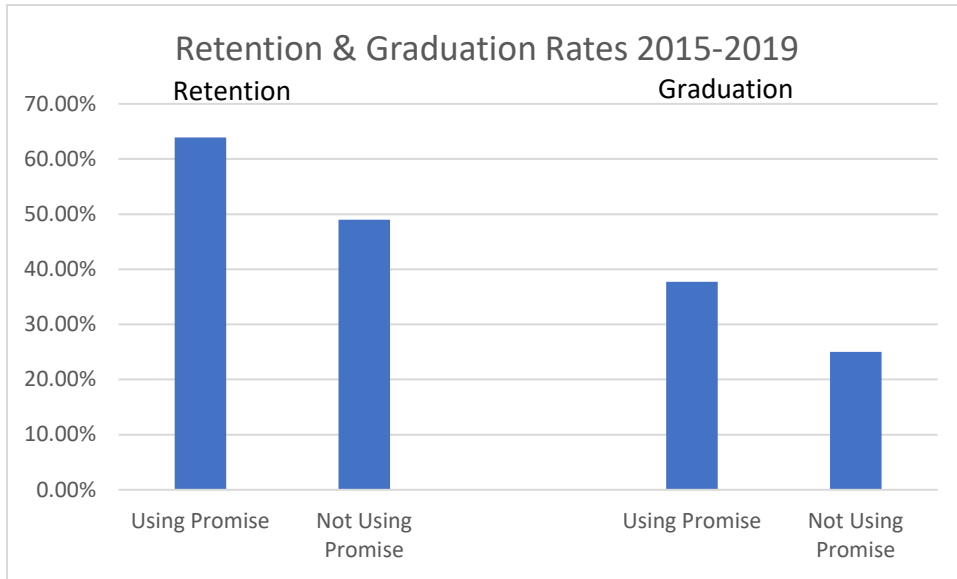
Discussion

       The results of this study do not support the report given by the Tennessee Higher

Education Commission (2022b) that stated neither retention nor graduation rates have

significantly improved in the years since Tennessee Promise was implemented in 2015. For the

participating Tennessee community colleges, retention and graduation rates significantly

improved among all first-time, full-time students from Tennessee. Also, Tennessee students

utilizing Tennessee Promise had significantly higher retention and graduation rates than those

not using Tennessee Promise during the Promise time period 2015-2019. However, not all

Tennessee community colleges participated in this study.

Although the reviewed literature described many obstacles students from Appalachia face in obtaining a higher education (Harris & Hodges, 2018; Malkus, 2018; Shuls, 2018; Wadsworth et al., 2008), this study showed that the retention and graduation rates of Appalachian students have increased with the implementation of Tennessee Promise. Rural Appalachian students outperformed rural non-Appalachian students and urban Appalachian students had more success than urban non-Appalachian students.

Pollard and Jacobsen (2021) stated that rural Appalachia is among the poorest regions in the United States. Disadvantaged students from this region would likely not receive financial assistance through Tennessee Promise, as they would receive other government aid first (Nguyen, 2020; THEC, n.d.-a). However, the other tenants of Tennessee Promise, such as mentoring, guidance through the college application process, and academic counseling once attending community college, provide the social capital resources that appeal to the culture of rural Appalachian students (Bryan et al., 2017; Coleman, 1988; Crumb & Larkin, 2018; Hlinka, 2017; McShane & Smarick, 2018; Meehan, 2019; Nguyen, 2020). The results of this study make a strong argument that Tennessee Promise has benefitted rural Appalachian students.

Implications for Practice

This study showed that retention and graduation rates for students from rural Tennessee Appalachian counties have improved with the implementation of Tennessee Promise. In response to these results, the following implications for practice are suggested:

- The Tennessee Higher Education Commission should look at Tennessee Promise results by region and student economic status to determine whether the neediest citizens are being helped. The Tennessee Higher Education Commission (2022b) analyzed Tennessee Promise by gathering data from the entire state, which resulted in the successes of the

program being overlooked. The region in the state that struggles greatly with abject poverty and lack of education is showing improvement.

- The Tennessee Higher Education Commission should report findings specific to Appalachia to Appalachian schools and community colleges. The plight of rural Appalachia has long been neglected (Ulrich-Schad & Duncan, 2018). What aid has been attempted has resulted in little improvement (Gaventa, 2019). It would be helpful to Appalachian high school and community college personnel to know what is working in their efforts to boost educational success for their students.

- The Tennessee Higher Education Commission should make Appalachian communities aware of the success Appalachian students are seeing with Tennessee Promise. It would be an encouragement for students and their parents to know that proven resources have been put in place to help them be successful. MacShane & Smarick (2018) explained that the common rural community attribute of pride should be leveraged when working towards educational improvement. The increase in community retention and graduation rates among rural Appalachian students could be a source of pride that motivates students, parents, and schools.

- The Tennessee Higher Education Commission should work with community colleges to find solutions to obstacles to higher education that Tennessee Promise does not remove. Perna (2020) explained that a continued barrier to community college success for low-income students are expenses such as books, transportation, and time taken from jobs. Determining and sharing what is working for students from specific regions could help improve the impoverished conditions of some Appalachian counties through higher education.

Recommendations for Research

The following are recommendations for further research:

- A replication of this study with the cooperation of all 13 Tennessee community colleges.

- A quantitative study of the relationship of Tennessee Promise to Tennessee counties designated as economically distressed in order to further explore the relationship of Tennessee Promise to students with the greatest need.

- A quantitative study of the relationship of Tennessee Promise to students from major metropolitan regions of Tennessee, as cities have unique economic and cultural characteristics.

- A quantitative study of the relationship of Tennessee Promise to students who are not economically distressed, as these are the students who are likely to actually receive the monetary assistance from Tennessee Promise.

This study was able to use data from six of the seven community colleges located in Appalachian Tennessee counties, making the results of research questions concerning Appalachia more valid. However, having data from all 13 community colleges would strengthen any future research, especially concerning non-Appalachian counties.

Summary

The implications of the findings of this study analyzing the relationship of Tennessee Promise to retention and graduation rates of rural Appalachian students were discussed in Chapter 5. The interpretation of the results was filtered through the social capital framework. Recommendations for implications of practice and further research were given.

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APPENDIX: Tennessee County Designations

Rural Appalachian Counties: Bledsoe, Campbell, Cannon, Claiborne, Clay, Cocke, Coffee, Cumberland, Dekalb, Fentress, Franklin, Grainger, Greene, Grundy, Hancock, Hawkins, Jackson, Jefferson, Johnson, Lawrence, Lewis, Macon, Marion, McMinn, Meigs, Monroe, Morgan, Overton, Pickett, Polk, Putnam, Rhea, Roane, Scott, Sequatchie, Sevier, Smith, Unicoi, Union, Van Buren, Warren, and White.

Rural Non-Appalachian Counties: Bedford, Benton, Carroll, Cheatham, Chester, Crockett, Decatur, Dickson, Dyer, Fayette, Gibson, Giles, Hardeman, Hardin, Haywood, Henderson, Henry, Hickman, Houston, Humphreys, Lake, Lauderdale, Lincoln, Marshall, Maury, McNairy, Moore, Obion, Perry, Robertson, Stewart, Tipton, Trousdale, Wayne, Weakley, and Wilson.

Urban Appalachian Counties: Anderson, Blount, Bradley, Carter, Hamblen, Hamilton, Knox, Loudon, Sullivan, and Washington.

Urban Non-Appalachian Counties: Davidson, Madison, Montgomery, Rutherford, Shelby, Sumner, and Williamson.

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