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MEASURING THE SUCCESS OF METROPOLITAN AND NONMETROPOLITAN STUDENTS AT A NONMETROPOLITAN UNIVERSITY

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ABSTRACT

MEASURING THE SUCCESS OF METROPOLITAN AND NONMETROPOLITAN
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Nonmetropolitan students in higher education are an understudied population. This thesis uses data from the freshman class of 2011 at a mid-sized nonmetropolitan university to examine the success of nonmetro students at a nonmetro university. The data studied addresses the similarities and dissimilarities between metro and nonmetro students in the cohort in a number of categories: student location of origin, time to degree completion, whether a degree was attained, grade point average of graduating students, type of degree sought, and type of degree attained. Differences were found in the success rates of metro and nonmetro students at the institution. There was higher than the national average percentage of nonmetro students in the cohort. Nonmetro graduating grade point averages were not significantly different from metro student grade point averages. However, nonmetro students sought and obtained less bachelor's degrees than metro students, a higher percentage of nonmetropolitan students than metro students did not finish a degree, and nonmetro students took longer to complete a degree than metro students.

ACKNOWLEDGEMENTS

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CHAPTER 1: INTRODUCTION

The extent of the rural student college transition experience is understudied (Friesen & Purc-Stephenson, 2016; Lucas, 2011; Guiffrida, 2008), even though 60 million people lived in nonmetropolitan areas in the United States as of the 2010 census (United States Department of Agriculture [USDA] Economic Research Service, 2017) and 57% of school districts are considered rural (Schafft, 2016). Research shows that the rural-urban college completion gap is growing (USDA Economic Research Service, 2017). In 2000, rural residents were 11 percentage points behind urban residents in college completion rates; the same study in 2015 found a 14 percentage point difference (USDA Economic Research Service, 2017). Of the U.S. population of traditional college age (18-24), 29% of the rural population are enrolled in college; that number jumps to 47% for metro populations (National Center for Education Statistics [NCES], 2013).

Student location of origin is not only not studied, but also not tracked by most colleges in the United States (Byun, Meece, & Irvin, 2012). Many universities have urban education degrees that teach students about urban populations and urban education, however, similar rural degrees are far and few between (Schafft, 2016). Rural students enter into postsecondary education with a unique set of experiences (Byun et al., 2012; Maltzan, 2007); however, the literature on the college experience focuses on the needs of urban students, or ignores that location of origin can affect the student success (Friesen & Purc-Stephenson, 2016; Nelson, 2016; Koricich, 2013). Rural students receive attention from universities only when they fall into certain categories that encompass other students who have been labelled 'at risk.' Rural students who are the first in their families to go to college or who come from a low socioeconomic background may be

flagged for intervention by university personnel. However, as has been noted in other research such as Goldrick-Rab's book *Paying the Price* (2016), the transition experience of students entering college cannot be solved by addressing one problem alone. For example, students who come from low socioeconomic backgrounds find many hurdles in the college experience that cannot be solved by a financial aid package (Goldrick-Rab, 2016). Many rural students do not meet any advising red flag, yet still experience setbacks that their urban peers do not (Guiffrida, 2008).

The following review of literature examines various topics that effect nonmetro students as they enter postsecondary education, such as the financial and opportunity cost of college for nonmetro students, their cultural motivations and limitations, and parental and community support. In order to examine the issues facing rural students in higher education, they must be identified and measured. Identification of the population is critical to initiating rural student support. In this thesis, I compare the success rates of freshman nonmetro students and metro students in a nonmetro university and discuss potential causes of the differences based on previous research.

Definition of Terms

In this study, I use 'location of origin' as a descriptor for students, just as socioeconomic status, race, or ethnicity have been used in previous studies. Location of origin is a more descriptive term than 'hometown' or 'home community,' as are used in many rurality studies. In order to include all students coming from a range of rural to urban backgrounds and move away from words that have prior connotations, I will use the terms 'metro' and 'nonmetro' to designate students who live in highly populous areas from students who do not. I use the designation

'nonmetro' and 'rural' interchangeably, however I do follow trends in scholarship that 'nonmetro' is generally used when referring to the aggregate population, and 'rural' is used when referring to a specific person or study (Rains, 2009; Maltzan, 2006).

The terms 'college' and 'university' are used throughout this thesis to denote higher educational institutions. Both types of institutions are able to confer postsecondary degrees, thereby fulfilling the goal of postsecondary education in this research.

History of the Term 'Rural'

To evaluate rural students, it is necessary to begin with what the term 'rural' means. The U.S. Census originally defined a rural town as one containing 2,500 or less residents (Ratcliffe, Burd, Holder & Fields, 2016). However, population infrastructure has changed considerably since the census set that mark in the early 1900s. Now, the Census Bureau defines a rural community as a place with 50,000 or less inhabitants (Ratcliffe, et al., 2016), although the older designation often shows up in literature. The National Center for Education Statistics (NCES) revised their self-proclaimed "urban-centric" school district classification system in 2006. Much like the USDA census adjustment, the NCES chose to revisit rural classifications based on their proximity to major population centers, as well as their population size (NCES, 2013).

Rural Classification Method

Modern rural economic analysts and other researchers have moved beyond the basic definition of areas as rural versus urban (Henderson & Weiler, 2004).The break-up of rurality into many categories is the result of an observance that rurality is experienced differently in different areas (Ratcliffe et al., 2016). Rural areas differ from one another in factors such as size of population center, proximity to metro areas, transportation availability, population density,

functional areas, and history with the surrounding populations. The Rural-Urban Continuum Codes are categories set by the U.S. Department of Agriculture's Economic Research Service (USDA ERS). The Rural-Urban Continuum allows researchers to analyze counties based on population density and metropolitan influence, rather than population headcount only (Parker, 2016). Rural areas that are far from populated areas have less access to jobs, education, technology, and services than a low population area that is near a metro location. The Rural-Urban Continuum Codes record 9 levels, listing three metropolitan and six nonmetropolitan county categories. The most recent dataset is from 2013, with the next planned data collection in 2023 (Parker, 2016). In the Rural-Urban Continuum, the metropolitan locations are ranked by population. The nonmetropolitan designations use both population and access to a metropolitan area to assess county placement. The Rural-Urban Continuum Codes help researchers break up metro and nonmetro areas in meaningful ways that are less subjective than other methods of classification.

Rural-Urban Continuum Codes
Metro 1 - Counties in metro areas of 1 million population or more
Metro 2 - Counties in metro areas of 250,000 to 1 million population
Metro 3 - Counties in metro areas of fewer than 250,000 population
Nonmetro 4 - Urban population of 20,000 or more, adjacent to a metro area
Nonmetro 5 - Urban population of 20,000 or more, not adjacent to a metro area
Nonmetro 6 - Urban population of 2,500 to 19,999, adjacent to a metro area
Nonmetro 7 - Urban population of 2,500 to 19,999, not adjacent to a metro area
Nonmetro 8 - Completely rural or less than 2,500 urban population, adjacent to a metro area
Nonmetro 9 - Completely rural or less than 2,500 urban population, not adjacent to a metro area

Table 1. Rural-Urban Continuum Codes from the United States Department of Agriculture Economic Research Service

United States department of agriculture economic research service. (2013). 2013 Rural-urban continuum codes [data file]. Retrieved from: https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx

Research Location

Since place is a significant factor in this study, it is important to place the university where the data was gathered. Northern Michigan University (NMU) is a mid-size master's level institution in Marquette County, a nonmetro five county in Michigan (per the Rural-Urban Continuum). The 2010 census for Marquette County listed the county population as 67,077 people and is not adjacent to a large population center (United States Census Bureau, 2010). For the purpose of this study, students from towns located in counties that are designated as nonmetro on the USDA Rural-Urban Continuum are considered to be rural/nonmetro students.

This includes nonmetro designations four through nine. Metro students are those residing in counties with metro one through three categories.

Research Questions

The research on belonging and identity indicates that nonmetro students who attend a metro university will experience a high level of habitus change and displacement from their community, which can contribute to high drop-out rates and lack of degree completion (Nelson, 2016; Rains, 2009; Lehmann, 2007; Maltzan, 2006). This study examines the rates of success of metro and nonmetro students when attending a nonmetro university in the same time period. Through these series of measures, I hope to find to create a snapshot of the success rates of rural students in a nonmetro university.

To do this I asked a number of questions:

What is the ratio of nonmetro to metro students in a nonmetro university?

What is the grade point average (GPA) of nonmetro and metro students at graduation?

Do nonmetro students enroll in and obtain different levels of degrees than metro students?

What is the rate of graduation for metro and nonmetro students at a nonmetro university?

How long does it take for metro and nonmetro students to complete a baccalaureate degree at a nonmetro university?

Significance of the Study

Much of rural higher education scholarship focuses on the experience of rural students entering metro schools (McDonough, Gildersleeve, & McClafferty, 2010). This is an important aspect of rural higher education research, but it needs to be balanced by the study of nonmetro students entering nonmetro universities. While many universities track the county, state, and country that their students come from, they do not quantify them with nonmetro or metro designations or analyze them as distinct groups. This results in little data about nonmetro student success and leaves nonmetro student data to be counted by K-12 data collection sources, like the National Center for Education Statistics, which can only measure how many students from rural school districts attend college in the year after high school. Other nonmetro success data is gathered by individual studies. There has been no acknowledgement of the rurality of the school the student chose to attend. Often, researchers assume that students who are attending a higher educational institution in a rural area are attending a community college (McDonough et al., 2010; Friesen & Perc-Stephenson, 2001). A number of colleges and universities exist in rural counties, however, since this has not been a measure used for student recruitment, a list of rurally designated colleges is not available.

The factors that affect student success are different at metro versus nonmetro institutions, therefore, a study of both is needed to fully examine the state of rural students. Northern Michigan University is located in a nonmetro-designated area, and is surrounded entirely by nonmetro counties. The study of the experiences of rural students entering college is especially significant to universities like Northern Michigan University, since around 50% of their student population is drawn from the local area (NMU Institutional Research, 2012). It is important for NMU to serve its community; both benefit from the success of rural students. A regular count of

rural students has not been conducted in the past, nor has a study of the retention and graduation rates of this group.

Rural students are important to the continuation of higher education in the United States for a number of reasons, but there are two that are striking. Post-secondary institutions need students to attend in order to continue to function, and rural areas need a college-educated population to prosper. To be productive members of a democracy, the population must be informed. Education needs to be extended to everyone, regardless of their location of origin. Education has become an instrument of outmigration, encouraging students to leave rural areas and seek expanded opportunities in urban locations (Schafft, 2016). Education policy and practice has not addressed the concerns of rural students and rural institutions (Schafft, 2016). Exploration of the success rates of nonmetro students at nonmetro institutions is an important step in learning to assist rural students as they transition to college.

Colleges across the country are struggling to fill seats as the population decreased after the baby boomer generation and their children grow older (Shugart, 2013). Colleges have explored ways to meet the needs of urban students, but have not yet rolled out rural student support networks (Lapan, Aoyagi, & Kayson, 2007). Just as first-generation students were identified by higher education professionals as a group that requires institutional responsiveness to succeed, rural students are now beginning to be recognized in the same manner. There are a number of attributes that are consistent across higher educational institutions, but some factors, like belonging, identity, and social and cultural capital, vary based on institutional nonmetro or metro location.

Study Parameters

This study examines incoming freshmen students at Northern Michigan University from the fall of 2011. The fall 2011 semester is similar in time to the latest survey of counties by the USDA Economic Research Service, which is from 2013, and the data from the National Center for Education Statistics, which is from 2010-2011. The data for this research was collected through the spring semester of 2018, which allows students who entered the university in 2011 six years to complete a degree. Time to completion data for baccalaureate-seeking students is usually examined at six years past the date of entering college (NCES, n.d.). Students who stop-out or take classes part-time may still be on track to completing their degree, but may take longer than six years. The habit of calculating graduation rates at six years in higher education is tied to the traditional model of college in which a student attends school full-time and has minimal outside obligations. This is not the path of many students today, including many rural students (Goldrick-Rab, 2016). The nonmetro student designation is inclusive of race and gender. Differences exist in the experiences of students based on race, ethnicity, gender, and a number of other variables, however, rurality research is in the beginning stages, and some information must be collected about nonmetro students as a whole before other student attributes can be addressed.

I chose to use a pragmatic paradigm for this research. Pragmatic outlooks favor applied knowledge and problem solving, as well as situating issues in social, historical, and political context. Rurality is not isolated in society. A grounded theoretical approach to the literature on rural success in higher education led to the discovery that nonmetro students at nonmetro institutions was highly understudied by existing research.

Theoretical Framework

Bourdieu's Theory of Habitus

Pierre Bourdieu was a social scientist, but his theories have been applied to students with much success (Crain, 2018; Hesmondhalgh, 2017; Friesen & Purc-Stephenson, 2016; Lehmann, 2007; Maltzan, 2006). Bourdieu's (1977) theory of habitus states that people become accustomed to their surroundings and often feel uncomfortable in situations that are far removed from ways of life that they have experienced in the past. In this theory, habits are the outward manifestation of social and cultural capital from a person's past. Bourdieu's (1977) idea of cultural capital includes mannerisms like tastes, deportment, clothing, skills, material belongings and credentials. Bourdieu likens habitus to reflexes learned in sports. Crain (2018) paraphrased Bourdieu when he referred to habitus as "rules of the game" that students have learned throughout their previous life experiences. Lack of knowledge of the rules can make a player very undesirable on a sports team, and lack of cultural capital can cause a student to not be accepted into a school they may be qualified for, or not be socially successful at a school they enter.

Tinto's Theory of Student Retention

Vincent Tinto's Theory of Student Retention has been the leading theoretical framework from which to view student attrition for some time. Tinto's (1993) retention theory is comprehensive. It allows for many factors to influence student decisions and outlook. In his book, *Leaving College* (1993), Tinto examines how external and historical attributes impact students' goals and their experience at college to ultimately cause them to complete or to leave college. Tinto (1993) asserts that background characteristics like family educational history, the

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students' skills and abilities, and prior schooling interact to create the students' goals and commitment to education. In addition, positive or negative reinforcement from the students' pre-college life can continue to affect their motivation to remain in school even after institutional ties have been made (Tinto, 1993).

Tinto (1993) posits that this base level of commitment is then increased or decreased through experiences the student has while in the institution as they integrate into higher education both academically and socially. In this way, student belonging is an integral part of retention. Good grades, interesting courses, and professional goals strengthen a student's commitment to education. Socially, interaction with faculty, other students, and staff increase a student's sense of belonging. Alternately, bad grades, negative interactions with others at the school, or disinterest in the coursework can push a student toward the dropout decision. Institutional culture that does not match the student or is negative or discouraging can also be intuited by students and lead to a drop in institutional commitment (Tinto, 1993). One of the most lasting aspects of Tinto's (1993) model is his understanding that a student's level of commitment to education can change over time and the decision to drop out is not made suddenly. Student identity and belonging are the overarching themes of the theory.

Tinto's theory is designed for traditional students who reside on campus during at least their first year of college. Tinto (1993) acknowledges that this is an incomplete picture of the student population, as not all student subgroups can be addressed. Tinto (1993) suggests that students will go through a transition time where they do not fit in either at home or at the university, and that the best way to overcome this is to immerse themselves in university life and culture and leave behind their previous life. For many students, including minority students and rural students, cutting ties with their previous culture is neither desirable nor healthy (Guiffrida

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2006). Guiffrida (2006) comments on Tinto's theory that, "recognizing that cultural connections can be fulfilled by both university social systems and home social systems allows the theory to better reflect the experiences of a more diverse group of college students, especially those who espouse collectivist orientations" (p. 458).

CHAPTER 2: REVIEW OF LITERATURE

Literature Research Method

Articles and books for this literature review were located using the Northern Michigan University Olsen Library's OneSearch, Google Scholarly articles, and the ERIC database. Among the search terms that yielded results were "rural students in college," "rural college adjustment," and "urban vs. rural university statistics." The snowballing technique was then used extensively to locate other sources. The sources found in other reviews provided a more in-depth study of the topic than did the original search results, which were often overviews and only quantitative in nature. In the following review of literature, I will describe the current research on rural students as they enter higher education, explore the topic on a large scale through statistics on rural college enrollment and completion rates, and address the unique experiences of individual students and the information their stories add to the national conversation.

The Rural Deficit: Rurality in America

Rural student higher education research often focuses on the adjustment of rural students to metropolitan institutions (McDonough et al., 2010). In this way, even rural research has an urban bias. The experience of rural students attending a rural university is largely unexamined. When rural students are examined in a metro atmosphere, they are being judged in a foreign environment. Nonmetro students have high standardized test scores and grade point averages in the rural K-12 system, which indicates that they are academically prepared for college (NCES, 2013). If academic preparedness is not at fault for nonmetro students' low success numbers in college, there must be other factors at play.

Much of the current research on rural students describes the struggles that students experience upon entering higher education (Friesen & Purc-Stephenson, 2016; Byun et al. 2012; Williams & Luo, 2010; Lehmann, 2007). The term 'rural deficit' has been used to encompass research declaring that rural students are under-prepared for college, have a high tendency to stop-out or drop-out, and are less likely than metropolitan students to pursue higher education at all (Williams & Luo, 2010; Donehower, Hogg, & Schell, 2007; Maltzan, 2006). Eckert and Alsup (2015), stated that "the existing narrative of rural education is one of lack, one of retreat, or one of escape, of teaching students to desire an (equally flawed) urban narrative and recognize the rural as impoverished" (p. 2).

The history of higher education in America has not been favorable of rurality. There has been a metro bias in education in which urbanized schools and students are considered the standard, and rural students and schools have been expected to conform to metro standards (Markus & Krupnick, 2017; Schafft & Youngblood Jackson, 2010). Schafft and Youngblood Jackson (2010) write that the division between rural and urban schools began in the 1900s when reformers came into rural communities and changed K-12 schools to reflect the efficiency models being implemented in urban schools at the time. The reformers' mission was to remove 'place' from students to make them mobile and adaptable to be ready to pursue careers in urban economies (Schafft & Youngblood Jackson, 2010). Higher education cannot afford to continue to ignore the identity of rural students entering postsecondary institutions if they want to increase the number of nonmetro students who attend and succeed in higher education. McDonough, Gildersleeve, and McClafferty Jarsky write that, "higher education needs to take responsibility for serving rural communities without expecting them to assimilate to dominant cultural practices" (2010, p. 192).

Nonmetro student attributes. The USDA Economic Research Service's 2017 study found that 29% of college enrollees were from rural areas. The National Center for Education Statistics reports that in the 2010-2011 academic year, 71% of students in rural school districts were White (2013). The University of California system tracks rural students entering California universities. They found that rural students in the fall of 2017 were as academically prepared as their metro counterparts and as likely to be admitted to a University of California school (University of California Institutional Research and Academic Planning, 2018). They also noted that rural students were more likely than metro students to be the first one in their family to attend college, generally referred to as a 'first-generation' student (University of California Institutional Research and Academic Planning, 2018). One deficiency in the University of California's statistics which is echoed in other rural research is that the tracking stops after students enroll in college. Enrolling in college is only the first step in a students' higher education pathway.

While research cannot encompass the experiences of all nonmetro students, it does inform educational institutions of the types of issues that nonmetro students may struggle with upon beginning their college career. U.S. Department of Education data shows that students from low-income areas, and students who are first-generation, are more likely than other students to be older than traditional college age, have more obligations outside of school, and are less likely to receive financial assistance from their family (Engle & Tinto, 2008). Urban low-income and first generation students have been often studied, however, these denominators are shared among a large portion of rural students, with a much smaller amount of research dedicated to nonmetro students (Koricich, 2013). Studies focus on the transition of rural students to colleges without mention of the location of the college. Researchers are beginning to recognize that the location of

origin of the student is important, but has not yet examined whether the location of the institution may also be significant. Nonmetro students who choose to pursue higher education at a nonmetro institution have very rarely been researched, and there is therefore very little data about the success of nonmetro students at nonmetro institutions.

Rural Ways of Attending. Nonmetro students often find themselves following a 'nontraditional' path through higher education (Goldrick-Rab, 2006). 'Traditional' college attendance is a limiting term, referring to students who attend college directly after high school and continue full-time until they have completed their degree (Goldrick-Rab. 2006). Students who do not have financial support, are older than traditional college age, or who have family commitments that require their time and energy, are not always able to follow the traditional college path (Friesen & Purc-Stephenson, 2016; Goldrick-Rab, 2016). Goldrick-Rab writes, "The structures and incentives that are present in the American higher education system must be designed with a new understanding that students follow complex, rather than linear, pathways through college" (2006, p.74). In a 2017 study by Byun, Meece, and Agger, nearly 50% of rural students attended a two-year college, with 25% of those transferring to a four-year school. All students who begin at a two year school are less likely to get a bachelor's degree than students who start at a four year institution (Goldrick-Rab, 2006). The process of transferring schools is complex and often students choose to end their educational career rather than start again at a new institution (Friesan & Perc-Stephenson, 2016; Goldrick-Rab, 2006).

Students who attend school near their home communities often do not live on campus and retain their previous responsibilities like a job, child-care, elderly care, or community engagement (Goldrick-Rab, 2016). It is important to note that age is a factor in non-academic responsibilities. Nontraditional students (those who are outside the 18-24 year old age group)

have significantly more responsibilities that draw their time and energy away from schoolwork (Crain, 2018). Students who juggle many responsibilities are not able or willing to take large course loads. This increases their time to completion. In contrast, Byun, Meece, and Agger's 2017 study on nonmetro student attributes found that nonmetro students completed degrees in less time than metro students. Institutional location research in the future may shed light on contradictory findings in rurality research.

Many metro school districts are able to offer dual enrollment and advanced placement (AP) college credits to their students. When these students enter college, they have already completed some of the credits necessary to graduate and so their time to graduation is shorter than for students without credits from high school. Previous research has noted that nonmetro school districts often do not have the funding, population, or opportunity to offer dual-enrollment classes or AP classes (Stone, 2014), however, recent changes in technology seem to be changing that trend. The University of California system's most recent rural student report found that rural students entering college had equivalent GPAs, coursework, and AP credits as their urban counterparts (2018).

Nonmetro Students in K-12 Education. In K-12 schools, rural students succeed. National Assessment of Educational Progress scores indicate that students in nonmetro areas are at least keeping up with students in metro areas; their scores average higher than urban and town students, but fall below those of suburban students (NCES, 2013). This trend follows through to graduation rates as well, with 68% of students in cities graduating, 79% of town students, 80% of rural students, and 81% of suburban students (NCES, 2013).
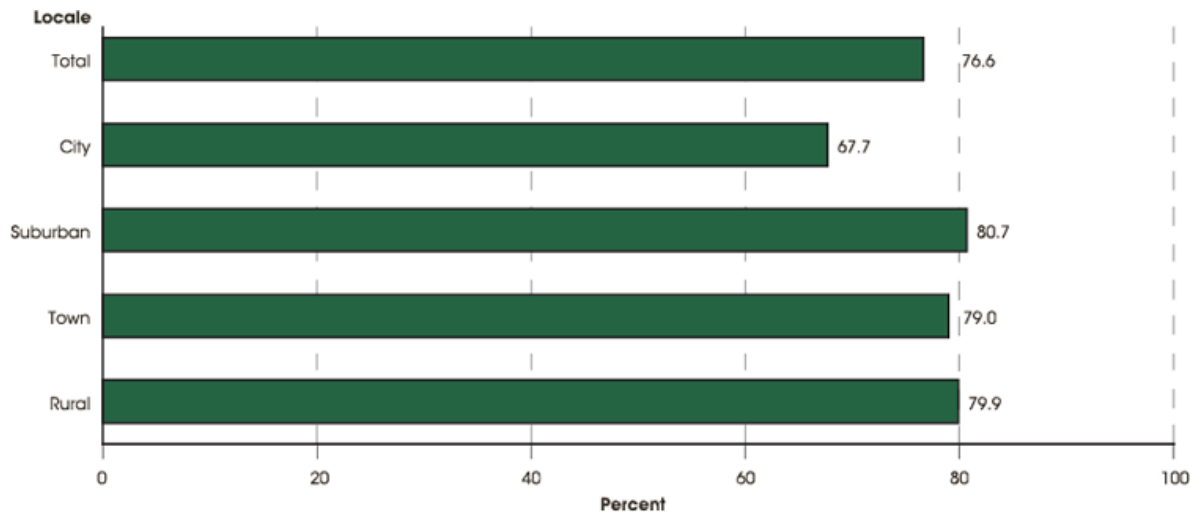
Figure 1. Average Freshman Graduation Rate (AFGR) for Public High School Students, by Locale: School year 2008-09

Reprinted from: National Center for Educational Statistics. (2013). *The status of rural education; Average freshman graduation rate (AFGR) for public high school students, by locale: School year 2008-09*. Retrieved from: https://nces.ed.gov/programs/coe/indicator_tla.asp

Rural students are consistently among the highest scoring section in K-12 testing, yet when college completion numbers are factored, rural students begin to lag. Gibb's 1995 study found that rural and urban students are equally likely to graduate from high school, but rural students are significantly less likely to attend college. The National Student Clearinghouse (NSC) survey of college enrollment (2016) found that 59% of rural high school graduates enrolled in college the fall following high school graduation, compared to 62% of urban students and 67% of suburban students. The NSC tracked college completion rates (factored to six years after high school graduation) for students in location-designated K-12 school districts and found completion rates of 45% for suburban students, 42% for rural students, and 36% for urban students (2016).

Nonmetro Student College Retention and Completion. Rural student retention is a critical issue, especially retention past the first year of college (Williams & Luo, 2010; Rains, 2009; Lehmann, 2007). The National Student Clearinghouse found that in 2013 88% of suburban students persisted into their second year, 84% of urban students, and 83% of rural students (2016). Since nonmetro student test scores are good, it would follow that some factor other than academic difficulty is causing the dropout rate at the post-secondary level. One cohort studied by Jeff Hawkins, the executive director of the Kentucky Valley Educational Cooperative, started with 618 students from Pike County, a nonmetro 7 designated county, who enrolled in various colleges and universities in 2015 (Marcus & Krupnick, 2017). Of those 618 students, only 350 returned for the spring semester, and 281 continued the next fall (Marcus & Krupnick, 2017). This means that only 45% of those who enrolled made it to their second year.

Rural (nonmetropolitan) areas see increases in post-high school education, but increasingly lag urban (metropolitan) areas in college completion
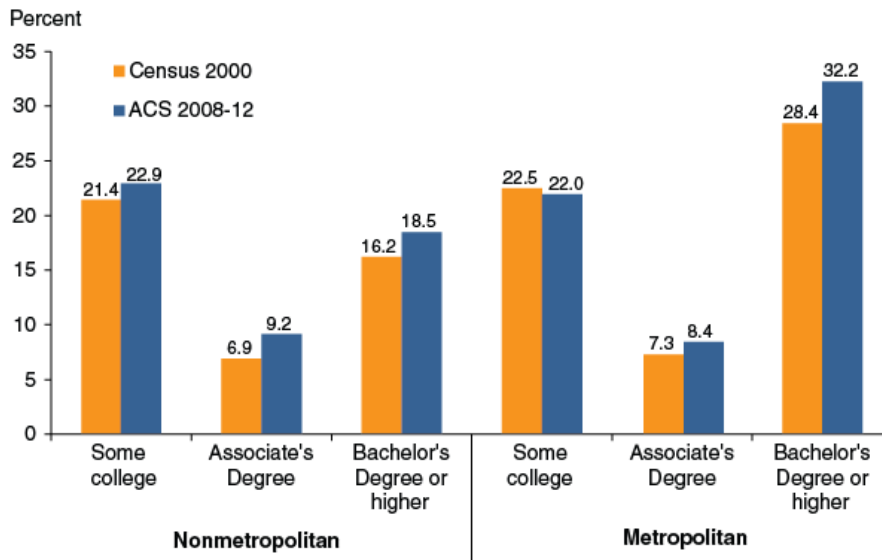
Source: USDA, Economic Research Service using data from the 2000 Census and the 2008-12 American Community Survey (ACS).

Note: Data are for the working-age population, ages 25 to 64. Metropolitan and nonmetropolitan counties are identified using the 2013 metropolitan area definitions from the Office of Management and Budget.

Figure 2. Post-high School Education in Metro and Nonmetro Locations

Reprinted from: Marre, A. (2014). *Rural areas lag urban areas in college completion* (United States Department of Agriculture Economic Research Service). Retrieved from: https://www.ers.usda.gov/amber-waves/2014/december/rural-areas-lag-urban-areas-in-college-completion/

While high school completion rates in rural areas have increased (NCES, 2013), college completion rates lag behind metro populations (Marre, 2014). The U.S. Census Bureau conducted an American Community Survey (ACS) from 2008-2012, which found that the percentage of adults with a college degree in rural areas was 14 percentage points below the rate in urban areas (Marre, 2014). The breakdown of the Census data versus the American Community Survey data can be seen in figure three. The survey also found that the type of college degree was a significant factor in rural-urban higher education statistics. The gap

between the rates of rural and urban 4-year degree completion grew by two percentage points between the census and the ACS (Marre, 2014).

Rural Barriers to Post-Secondary Success

Distance from Institutions. Whereas metro students often live near one or more colleges, nonmetro students are unlikely to be situated near a college or university (Guiffrida, 2008). The state of Pennsylvania is one of the few areas in the country that tracks the location of degree granting institutions. As of 2015, there were 57 colleges located in rural Pennsylvania, and 208 located in urban areas (The Center for Rural Pennsylvania, 2015). In a 2016 study of rural students by Friesen and Purc-Stephenson, 71% of the participants stated that the distance from their location to a university was a significant barrier to their pursuit of higher education. Participants in the study noted that responsibilities with their families, communities, and current jobs, would have to be adjusted or cut off for them to enroll in a university (Friesen & Purc-Stephenson, 2016). Nonmetro students incur expenses when they need to move for school, buy a car, and travel a significant distance to visit home (Friesen & Purc-Stephenson, 2016).The participants in this study viewed urban students as privileged because they could live at home while attending university, which would keep the cost of attending lower for them, as well as allow them to remain in contact with their families and friends (Friesen & Purc-Stephenson, 2016).

Technological changes may extend a measure of access equality to rural students. Nontraditional students in rural areas are often place-bound by family or a career; they stand to benefit greatly from online education (Crump & Twyford, 2010). Participants in Rains' 2009 study stated that they were able to enroll in dual-education courses at their high school and had connections to larger student bodies through technology. The effect of online education

opportunities for rural students has not yet been researched. Rural areas are some of the last in the country to receive internet access (Smith, 2018), but access is rapidly expanding. Pennsylvania is currently initiating a broadband expansion to the 520,000 rural Pennsylvania residents who have not had access to high-speed internet (Smith, 2018), and Northern Michigan University recently received a grant from the state of Michigan to install and maintain a broadband network across rural Northern Michigan counties (Bowers, 2016).

Williams and Luo's 2010 study of first year students in nonmetropolitan areas found that students were more successful and happier with their college experience when institutions were located near the students' location of origin. Students who attended institutions within 50 miles or less of their home had the highest rates of first-year persistence (Williams & Luo, 2010). An explanation for increased student success at close institutions may be found in the continuity between students' habitual cultural experiences and that of the university system in which they enroll (Williams & Luo, 2010; Lehmann, 2007).

Financial Cost. Aside from the emotional cost of moving away from home and establishing oneself in a new and unfamiliar environment, many nonmetro students find finances a barrier to their higher education aspirations (Friesen & Purc-Stephenson, 2016). Nonmetro income levels are lower than those of urban residents (Henderson & Weiler, 2004). For example, the state of Pennsylvania has been tracking rural and urban patterns for a number of years. Their most recent report states that in 2015 per capita income in Pennsylvania's rural counties was $12,030 less than in urban counties (The Center for Rural Pennsylvania, 2015). The gap between urban and rural incomes, adjusted for inflation, has more than doubled since 1970 (The Center for Rural Pennsylvania, 2015). The cost of higher education is more of a burden for families and students in low income areas than those with high incomes.

Possibly as a result of low rural income levels, rural students enroll in less expensive schools and take out more loans that they must pay back after college than urban students (Gibbs, 1998). Students from nonmetro areas are often expected to work part-time or full-time jobs while they attend college (Ali & McWhirter, 2006). The time spent at work can interfere with students' ability to complete their schoolwork and to engage in campus events and activities (Crain, 2018; Ali & McWhirter, 2006). Tinto's (1993) theory of retention states that students who are unable to become socially involved in their school are more likely to stop attending.

Opportunity Cost. 'Opportunity cost' is an economic term that addresses that any decision made is at the cost of the potential gain from the alternate choice. Students who had many friends and family who did not attend college reported struggling with the opportunity cost of college (Goldrick-Rab, 2016). Students pass up short term wages to attend college in the hopes that they will see long-term gains with the degree (Goldrick-Rab, 2016). In *Paying the Price,* Sara Goldrick-Rab (2006) discusses that opportunity costs of college that are not factored into the cost of attendance and are therefore not discussed by institutions when enrolling students. Students from resource-heavy regions hear messages from their families and communities that higher education and career mobility are not necessary to make money (Marcus & Krupnick, 2017; Ali & Saunders, 2009). Jobs in mining, forestry, and manufacturing allowed previous generations to work in stable career fields with good wages without obtaining a college degree, however, financial opportunities have largely moved to urban areas, making the prosperous rural way of life unsustainable for the next generation (McDonough et al., 2010).

Students who want to return to a rural area after college are aware that they may not make a significantly higher wage than their peers who did not attend college (McDonough et al., 2010). The recent underemployment and unemployment trends have hit rural communities hard

and changed the career landscape for rural youth (Ali & McWhirter, 2006). Low rural income levels and few jobs that require a college degree mean that the return on investment from rural student tuition and the opportunity costs of attending college is lower for students who wish to return to rural areas after college (Crain, 2018). Despite an increased need for college credentials in the job market, the rural collective view on education has yet to change (Crain, 2018). A 2018 study by Crain found that only 33% of rural residents felt that a four-year degree was a worthwhile endeavor. This number increased to 52% when metro residents were polled (Crain, 2018).

Communication about Higher Education. Dr. Schafft, the director of the Center on Rural Education and Communities at Penn State, summed up the dilemma that rural students and their families often faced, "It is not simply deciding to get a college degree, but deciding you will probably not be able to come back" (as qtd. in Pappano, 2017a, p. 2). Rural families are aware that higher education can change their relationship with the student, and that there is a high likelihood that after college, students will permanently move away from their rural location of origin in pursuit of a career (Rains, 2009; Maltzan, 2006; Gibbs, 1995). Half of rural students who attend college leave home and do not return by the age of 25 (Gibbs, 1998). Nonmetro college alumni do not often return to rural areas after college because jobs in rural areas rarely require a college degree (Crain, 2018). Students in Maltzan's 2006 study reported that their family was relieved when they dropped out of school. University counseling staff who work with rural students argue that rural students more than others need to "learn to leave" their home community (Crain, 2018). Another solution to this problem may be having more colleges and universities located in nonmetro areas or accessible through the internet, as well as expanding high-skill industries into rural areas.

Rural scholars have found that children in families where the parents have not attended college often are given mixed messages about the utility and desirability of higher education, especially four-year degrees (Lucas, 2011). Parents' educational attainment has long been a predictor of educational aspirations and success for students (Engle & Tinto, 2008). Since nonmetro college students are not nationally tracked, there is no data indicating how many nonmetro students are also first generation. However, the USDA Economic Research Service found that fewer than 1 in 5 rural adults have a college degree (2017).

Cultural and Social Capital

Cultural capital is the collection of knowledge, behaviors, and skills that an individual has learned over their lifetime, which adds to their cultural competence (Bourdieu, 1977). Social capital refers to the information-sharing networks and supportive relationships of an individual that provide access to information and opportunity (McClellan, 2016). The study of capital has shown both positive and negative results for nonmetro students. Rural students enter college with limited social and cultural capital that can be applied to the college experience (Crain, 2018), but significant support from their home communities (Nelson, 2016; Rains, 2009; Maltzan, 2006).

The Impact of Location on Cultural Capital. Students who live in the vicinity of higher educational institutions come in contact with university events, personnel, and students. This provides them with familiarity with higher education institutions and the type of culture to expect from them (Guiffrida, 2008). Some metro students or their parents have the ability to forge connections with nearby universities and their members, thereby increasing the chances of the student being admitted and of having members of the faculty and staff looking out for them during their time at the university (Guiffrida, 2008). Physical location, and often cultural norms, prevent this from happening for nonmetro students (Lucas, 2011; Guiffrida, 2008). There are less

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college educated adults in rural areas for students to look up to and engage with, and as a result, higher education can seem very distant and not a part of everyday life for students in these areas (Byun et al., 2012; Lucas, 2011; Andres & Looker, 2001). Metro students stand to benefit from their proximity and familiarity with colleges and people who have attended college, while rural students must create context for higher education through short visits, media, or not until they enroll in school.

Unfamiliarity with universities, and especially selective universities, often leads to rural students 'undermatching' with a college (Koricich, 2013; Gibbs, 1995). 'Undermatching' is a term used by admissions professionals that refers to students with high potential enrolling in schools that will not challenge their intellectual abilities. Nonmetro students are overrepresented in public institutions, and underrepresented in private, selective colleges (Byun, Irvin & Meece, 2012). Koricich's 2013 study found that metro students attended highly selective colleges and universities at nearly twice the rate of students from nonmetro areas. Rural counselors report that they do not push students to apply to private and selective schools because they don't feel that rural students have the classes and extracurricular activities needed to be admitted to the most competitive schools (Belkin, 2017). Lack of knowledge about alternative funding sources and routes into selective institutions deters students and their mentors from trying to attend selective schools (Koricich, 2013). Students who undermatch may lose opportunities that they would have encountered in a more demanding school or program.

Positive Social Capital. Rural students report that their teachers, guidance counselors, and other community adults helped them to think about higher education and navigate its systems (Maltzan, 2006). A number of participants in Rains' 2009 study in North Dakota stated that they first considered attending college as a result of the expectations of their teachers and

counselors. High schools who focused on preparing rural students for entering college had higher

rates of students who were admitted to college (Byun et al., 2017). The assistance of high school

teachers and counselors has the potential to offset the parental educational attainment factor that

often results in low college enrollment in areas where parents have not invested in higher

education (Nelson, 2016).

Small school districts have better success rates than larger schools (Byun et al., 2017).

Students in Maltzan's (2006) study reported that they often stayed in touch with mentors from

their high schools and would seek their assistance when faced with challenges in college.

Nonmetro high schools often have low student-to-staff ratios and community support that allows

them to realistically strive for personal interventions in the lives of students, while metro high

schools are not often able to be involved at such a detailed level. The academic and moral

support that small communities provide to their students greatly impacts their success in college.

Identity and Belonging

Change of Habitus in New Surroundings. Nonmetro students who choose to attend an

urban higher educational institution often find that they must reevaluate their core sense of self

upon embarking on their academic career (Rains, 2009; Maltzan, 2006). When students leave

nonmetro areas and enter the complex society that exists in urban centers, they find many

different aspects of life that are new and uncomfortable for them. Rural areas tend to be

homogenous; they often have little racial, ethnic, economic, or political diversity (Byun, 2012).

Nonmetro students expressed discomfort or fears about metro issues like crime, homeless people,

large campus complexes, unfamiliar streets and traffic patterns, and racial differences (Rains,

2009; Maltzan, 2006). Maltzan (2006) and Rains' (2009) qualitative studies on rural students

transitioning to college offer useful examples of the experiences of rural students that exemplify

the data in quantitative studies. One participant in Rains' (2009) study stated that she and her other rural friends had to rely on her new metro friends to learn university safety rules like to not walk alone at night and to lock their cars. The student noted that it was embarrassing to have to rely on other students to learn habits that seemed reflexive to the metro students (Rains, 2009). In Pappano's (2017b) interview with a rural student who had been accepted to an Ivy League school, the student chose to turn down admission at the school and attend a local college instead because the student's parents and the student had fears about crime and life in the city where the Ivy League school was located.

Academic Identity Shift. Nonmetro students in Maltzan's (2006) study felt that the academic environment in college was very different than their past educational experiences. Many rural schools have a low ratio of students to teachers, and students are encouraged to participate in many school activities (Maltzan, 2006). On college campuses, students find themselves in lecture hall classes with 100 or more students. The faculty and staff are not able to individually become involved in the lives of their students. Student groups at universities, while plentiful, can also be large and self-sufficient entities. Students from rural areas often find that, as opposed to the experiences in high school, they are not sought out to become an important or active member of student groups immediately upon entering college (Maltzan, 2006). When faced with the large student numbers at universities and their perceived unimportance, some rural students stated that they "find their core senses of self reanimated *in community*, the rural community in and with which they were identified" (Maltzan, 2006 p. 184). For some in Maltzan's (2006) study, this meant dropping out and going home.

Socioeconomic Identity Shift and Barriers. The phenomenon of "status continuity" states that children tend to recreate their parents' occupation and social status; people who attend

college whose parents did not are severing themselves from social and cultural continuity and will feel discomfort in the change (Lucas, 2011). Studies of "straddlers" – those with a blue-collar upbringing who are now in white-collar positions – show that they do not feel like a part of either group (Lucas, 2011). Often, rural students come from blue-collar backgrounds, and experience this feeling of being caught between two worlds when they enter college (Ali & Saunders, 2009; Lucas, 2011). Ali and Saunders (2009) found that students from blue-collar, rural backgrounds responded to the upper class, metro biases at postsecondary institutions by tempering their career and educational expectations. Many blue-collar students in the Lehmann's 2007 study dropped out of school and returned home, describing the relief of being home as if they were returning from visiting a foreign country. It is interesting to note that in Lehmann's (2007) study, middle and upper class students who dropped out almost always failed out academically, but working class students who left school very often cited their discomfort and inability to fit in as the primary reason for their decision to quit.

Rural communities have limited career options, with few large employers or types of employment (Pew Research Center, 2016). As a result, nonmetro areas tend to be socio-economically homogenous, or nearly so (Ratcliffe, Burd, Holder & Fields, 2016). Many universities have a large percentage of students from suburban upper-middle class to upper class background (Lehmann, 2007). The rural students in Lehmann's (2007) study of 25 individuals who dropped out of a large research university said they felt uncomfortable around their upper class metro peers and that their habitual attitudes, ways of speaking, topics of conversation, and ways of dressing were not shared by many of their university colleagues. Hesmondhalgh (2017) writes, "The reinforcement of stereotypes about working-class dress and behavior might work together with existing institutional practices to make it even more difficult for working-class

people to gain access to prestigious universities, socially-valued and/or well-rewarded professional jobs and so on" (p.2). Though Hesmondhalgh writes from the University of Leeds in England, his analysis encompasses Western culture as a whole. In his 2017 work, Hesmondhalgh states that education is often proposed as a solution to the problem of isolated social classes, but points out that educational institutions tend to remove working-class people from working-class culture.

Coping with Loss of Identity. New modes of learning, relationships with professors, relationships with new peers, along with the complex structure of higher education institutions, create vast unknowns for all students entering college, but to a higher degree for nonmetro students than for their metro peers. Metro students' habitus, the ways of life in a populous, structured urban center, is more similar to the structure of higher education than the informal, personalized habitus of nonmetro students; which makes the transition from high school to college a severe break in habitus for nonmetro students (Rains, 2009; Dees, 2007; Lehmann, 2007). Lehmann found that many of the students in her study from nonmetro working-class communities felt a disorienting loss of habitus and personal identity upon entering college (2007).

Nonmetro students report a sense that they may distance themselves from their families and friends by pursuing higher education (Lucas, 2011; Lehmann, 2007). The language used to encourage students to pursue higher education is language developed for an urban audience, stressing career and personal achievement as very desirable goals (Schafft & Youngblood Jackson, 2010) while rural community communications with nonmetro students value family and community over career advancement (Ali & McWhirter, 2006). Rural students are told they must *go* to better themselves, which creates a dichotomy between those who leave and become

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'better', and those who stay and are presumably worse (McDonough et al., 2010). Nonmetro students in Ali and McWhirter's 2006 study reported being accused of acting better than their home acquaintances who had not attended college. Some nonmetro students feel that after attending college they no longer belonged in their home communities, or that fitting in at college would mean that they would no longer fit in at home (Lehmann, 2007). One coping mechanism of nonmetro students who attend university is to make their 'rural' or 'blue-collar' roots the most salient feature in their identity (Christiaens, 2015; Lehmann, 2007). These rural students embrace positive rural stereotypes and vilify the urban life as egotistical and selfish in an effort to remain close to their upbringing (Friesen & Purc-Stephenson, 2016).

Group Identity at Postsecondary Institutions. Dees refers to rural students as cultural immigrants in higher education (2006). The USDA Economic Research Service's 2017 study found that 29% of college enrollees were from rural areas, which means that rural students will often be a minority in postsecondary institutions. Rural students entering higher education settings experience a shift in the culture around them, which can cause feelings of loss of identity and misplacement (Maltzan, 2006).

The traditional university model is white, residential, middle to upper class, and suburban. An increasing number of students in the postsecondary education system do not conform to the traditional student model (Goldrick-Rab, 2006). Researchers have studied the belonging and transition experiences of a number of minority student groups in an effort to provide support and assistance in areas where non-traditional students struggle (GoldrickRab, 2006; Guiffrida, 2008). Postsecondary institutions want to enroll rural students, but the majority have not addressed the cultural change experienced by rural students as they enter their institutions (Byun et al., 2017; Christiaens, 2015; Lapan et al., 2007). Scott McDonald, the

Director of Admissions at Texas A&M supported his institution's expansion of rural recruitment efforts by stating, "In terms of diversity, geography is just as important as racial and ethnic" (as qtd. in Crain, 2018 p.1).

Tinto's theory of retention assumes a metro, largely traditional student body, and urges students to cut ties with home in order to make connections at college (1993). He states that students who are heavily involved on campus will begin to find their identity and sense of belonging from the people at the institution. However, Guiffrida (2006) cites studies in which have found that underrepresented students do better when they are able to draw support from home communities and do not have to cut ties with their heritage upon beginning college. Nonmetro students have strong ties to their family, community, and location of origin (Stone, 2014; Rains, 2009; Maltzan, 2006; Dees, 2006). Dees points out that the dominant university culture is more often at odds with rural culture than metro culture, and can create stress for the students who feel they must pick between school and home (Dees, 2006). Perhaps rural students, like underrepresented students, do not need to remove themselves from their culture of origin, but need to be able to draw on that support structure to achieve emotional stability during college.

Nonmetro students try to fit in with their metro counterparts by mimicking their speech, appearance, manners, and interests (Lehmann, 2007). Christiaens (2015) noted that their needs as a rural student was disguised by their appearance as a white student who resembled others who were not experiencing the extreme change in culture that they were upon moving from a small town to a large city to attend college. Nonmetro students like Christiaens are difficult for educational institutions to identify because they can look and present themselves similarly to metro students. Rains' 2009 study found that rural students were less likely to seek help at a

counseling center than their urban counterparts. Counselors interviewed by Crain (2018) felt that rural students did not have past experience that informed them how to communicate distress in ways that college counselors are trained to monitor. The social experience of small community life becomes a communication gulf when college counselors and rural students interact (Rains, 2009).

The Current Rural-Higher Education Climate. Societies can at times rely on broad and often erroneous stereotypes to classify groups of people. These "sociocultural discursive mechanisms" have standardized urban as educated and rural as backwards (Schafft, 2010 p.277). In an interview with *The Atlantic*, Charles Fluharty, the president and CEO of the Rural Policy Research Institute at the University of Iowa stated that disdain for rural people is "the last acceptable prejudice in America" (Marcus & Krupnick, 2017). While college campuses have worked to eradicate prejudices on their campuses, terms like 'hillbilly', 'white trash', and 'redneck' are still viewed as tolerable labels (Markus & Krupnick, 2017). In an interview with *The New York Times,* rural college student John Dunn stated that he was nervous to start college because he felt that other students would think he was a 'redneck' who didn't know how to spell or read (Pappano, 2017b).

Dees' work with students in Appalachia found that students felt a significant amount of cultural stress in higher education as they were introduced to new ideas and concepts that were foreign to the culture of their rural location of origin (2007). Dees' states, "The university classroom, through power relationships that are constructed through cultural norms such as grading, classroom expectations, and professor-student relationships, becomes a cultural system with hidden rules that may be difficult for students to negotiate" (Dees, 2006 p.2). For example, nonmetro students responding to Rains' 2009 study said that large classes were one of the most

uncomfortable parts of their college academic experience. One student stated that it took him until his senior year ask questions in his classes (Rains, 2009). While at college, the college is the dominant culture. Individual students are not in a position of power in a post-secondary institution. They therefore must adapt to the norms of that place and find a way to resolve conflicts between the cultural outlook of their college teachers and colleagues and that of their home community members or make a choice between the two (Dees, 2007). The stress of resolving complex conflicts of ideals may be one reason for the finding that nonmetro students tend to drop out of school as a result of lack of belonging rather than academic struggles (Lehmann, 2007). An expanded option of nonmetro-located universities for nonmetro students could lessen the cultural change stress that nonmetro students experience when entering higher education, but research indicates that they will still experience a cultural shift that they need to be prepared to address.

Rural economic changes that have resulted in job losses and caused the rural-urban income gap to grow have fueled resentment of metro areas and their economic institutions (Pappano, 2017b). While not all colleges and universities are located in metro areas, they are viewed as branches of an urban institution (McDonough et al., 2010). The social disconnect between rural communities and higher education is a phenomenon that is often quoted but not often explored (Crain 2018; Lehmann, 2007; Dees 2006). An Inside Higher Ed and Gallup poll of college admissions personnel indicated that 38% of schools had increased rural outreach since 2016 because they believe that low-income, white, rural people feel disconnected from university culture (Anderson, 2017). In Belkin's 2017 article, Emily Ritchey, a rural student at Franklin & Marshall College, said, "My family asks me all the time if I'm just learning liberal rhetoric." Students whose families do not have experience with higher education find it difficult to talk

about their college experiences at home. Lack of college-enrolling rural students and the possibility of a growing political disconnect between rural areas and higher education could have a significant impact on colleges and universities located in rural areas, since the local population is often a significant source of students for those schools (USDA, 2018).

Summary

Nonmetro students succeed academically in rural school districts (NSC, 2016; NCES, 2013), but studies indicate that they have lower success rates in post-secondary education (Marcus & Krupnick, 2017; NSC, 2016; Koricich, 2013, Williams & Luo, 2010). The distance of nonmetro student location of origin from the social and cultural capital of metropolitan areas results in a lack of knowledge of the habits of post-secondary institutions (Friesen & Purc-Stephenson, 2016; Williams & Luo, 2010; Andres & Looker, 2001). Nonmetro students struggle with issues of belonging and identity as they assimilate into large institutions (Crain, 2018; Rains, 2009; Lehmann, 2007; Maltzan, 2006). They often are difficult for colleges to identify and assist both because they often appear similar to metro students and because location of origin is not currently tracked by admission personnel in colleges and universities (Christiaens, 2015; Guiffrida, 2008).

CHAPTER 3: METHODS

This study examines and compares the success of metro and nonmetro students at a nonmetro university. Rural student research often focuses on the experience of rural students at universities without reference to the location of the university. High school academic records and qualitative studies of rural students suggest that rural students do not leave college because they are academically unprepared, but because they struggle with belonging and a lack of identity (NCES, 2013; Rains, 2009; Lehman, 2007; Maltzan, 2006). The data obtained for this research evaluates a number of factors that measure the success of metro students and nonmetro students at a nonmetro university and compares their outcomes.

Research Questions

In order to answer the overarching question examining nonmetro versus metro student success at a nonmetro university, I asked a number of smaller questions of the data. The questions I asked of the data from the cohort examined were:

What is the percentage of nonmetro students?

What is the average grade point average of metro and nonmetro students at graduation?

What types of degrees do metro and nonmetro students seek?

What types of degrees do metro and nonmetro students obtain?

What percentage of metro and nonmetro students earned a degree?

What is the timescale in which metro and nonmetro students graduate?

Institutional Setting

This data set is from the fall 2011 class at Northern Michigan University (NMU). Northern Michigan University is located in Marquette County, a nonmetro code five county. A nonmetro five county is defined by the USDA as an "urban population of 20,000 or more, not adjacent to a metro area" (USDA Economic Research Service, 2013). Marquette County has a population of 67,077 (United States Census Bureau, 2010). Marquette county is 93% white, with a median household income of $46,822 (United States Census Bureau, 2010). The city of Marquette, home to Northern Michigan University, is a micropolitan location, which is defined as a population center containing more than 10,000 but less than 50,000 people and is not adjacent to an urban center (USDA Economic Research Service, 2013).

NMU is a public university that serves primarily undergraduate students. In the 2011 academic year, NMU enrolled 9,405 students, 8,712 of whom were undergraduates. According to the NMU Institutional Research office, 87% of the NMU's 2011 student population was White (NMU Institutional Research, 2012). The student population location of origin is largely regional. In the 2011-2012 academic year 81% of students were Michigan residents (NMU Institutional Research, 2012). Specifically, Northern Michigan University serves the rural areas that surround it. The Upper Peninsula of Michigan is composed of only nonmetro counties (codes 5 through 9). In 2011, 51% of students enrolled at NMU were from Upper Peninsula counties (NMU Institutional Research, 2012).

Data Set and Validation Strategies

The data set for this research includes all first-time freshman who first enrolled at Northern Michigan University in fall semester of 2011. The data is de-identified and therefore the NMU Human Subjects Institutional Review Board has declared the research exempt from review. It is a snapshot of one incoming class and allows for analysis of the educational paths of these students specifically. The dataset includes the de-identified data from 1740 students. Of those, fifteen students were removed from the dataset whose county data did not fall in the range of the USDA Rural-Urban Continuum. Thirteen were international students, and two were students whose place data did not provide enough information for them to be rated on the continuum. The dependent variables included in the dataset for this project were: type of degree sought, grade point average at the time of graduation, semester of degree attainment, type of degree (if any) gained, and county and state of residence at the time of admission. The students' counties of origin were matched to scale set out by the United States Department of Agriculture in the 2013 Rural-Urban Continuum dataset. Rural-Urban Continuum codes one through three are considered metropolitan codes, while codes four through nine are nonmetropolitan codes.

Peer examination was used to verify the data. Descriptive statistics were conducted on the time-to-completion, degrees sought, degrees attained, and type of degree datasets. The time-to-completion data was subjected to an independent t-test to examine statistical significance. A t-test was also conducted on the GPA data to determine significance of the metro versus nonmetro GPA difference.

Success Metrics

For this study, student success was measured in terms of degree attainment. Degree attainment measures in research are often constrained to students who complete a baccalaureate degree. This is a narrow definition of success that prioritizes certain types of learning and career pathways over others. For this study I chose to focus on student attainment of baccalaureate degrees, associate degrees, and also vocational certificates. Students who enter college to seek an associate's degree and graduate with an associate's degree are not failing to obtain a bachelor's degree; they are graduating with the degree level they intended. While I made the choice to include all degree levels completions as success, I also examined the level of degrees sought and obtained by rural and nonmetro students. Prior research has shown that nonmetro students often seek lower degree levels than metro students (Byun et al., 2017; McDonough et al., 2010). Although obtaining any level of degree is important, nonmetro students may seek degrees that are lower than their educational potential as a result of societal factors.

CHAPTER 4: RESULTS

Enrolled Population

National average enrollment of nonmetro students in higher educational institutions is 29% (USDA Economic Research Service, 2017). Of the 1725 students measured in this study, 832 (48%) listed an admission address in a metro designated county (Rural-Urban Continuum codes 1-3), and 893 (52%) students were listed under a nonmetro county (codes 4-9). The percentage of rural students in this study is similar to the percentage of students enrolled in NMU from Upper Peninsula counties, which are all rural. This is a good indication that the 2011 cohort is not an anomaly, and is likely representative of the university population as a whole at that time.

Degree Completion

Of the 1725 students in the data set, 868 (50%) students completed a degree between enrolling in August of 2011 and May of 2018. Those listed as completing a degree for this research include students who graduated with a bachelor's, associate, or vocational degree. Of the students who completed a degree, 49% were from a nonmetro county, and 51% were from a metro county.

Student Grade Point

The average grade point average for the 427 (49%) nonmetro students who graduated from the 2011 cohort was 2.98. Metro students had an average GPA of 2.99. A t-test was conducted to explore the significance of the GPA difference and found that the difference was

not significant. The tested difference between GPAs was: for metro students (M=2.99, SD=0.874) and nonmetro students (M=2.98, SD=0.821); t(440,426), p=0.8203.

Degree Sought

The enrollees for this cohort consisted of 1725 students, who were 52% nonmetro and 48% metro. Upon beginning college the students declared a degree track: 75% of the students declared a baccalaureate degree, 21% declared an associate's degree, and 4% of students declared a vocational certificate program. Of the bachelor's seeking students, 56% were metro students and 44% were nonmetro students. Nonmetro students made up nearly all of the associate and vocational degrees. Of the 356 students who entered college seeking an associate degree, 72% were nonmetro. This trend is even more exaggerated in the vocational certificate numbers, where 98% of the vocational seekers were nonmetro students. In fact, for this cohort there were only 5 metro students who sought a vocational certificate.
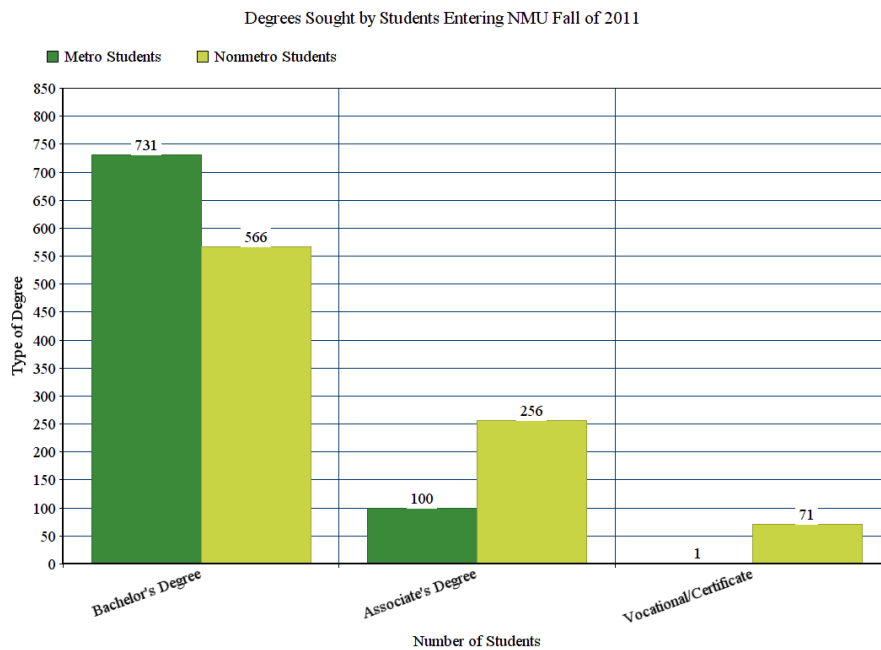
Figure 3. Degrees Sought by Students Entering NMU Fall of 2011

Degree Attained

While degree sought can inform researchers about the intent of nonmetro students entering college, it does not tell us the final result of their higher education. Of the 1725 students who enrolled in the fall 2011 cohort, 868 (50%) obtained a degree by the time of the data compilation in 2018. The number of metro students who graduated was 441, 51% of the graduating class. Nonmetro students totaled 427 graduating students, equaling 49% of the graduating class. The numbers of students who did not complete a degree are also relevant to the discussion; 857 (50%) students who began in the cohort of fall 2011 did not graduate. Those who did not graduate were comprised of 391 metro students, 46% of the incoming cohort, and 466 nonmetro students, 54% of the incoming cohort.

Of the students who completed a degree, 7% obtained a vocational certificate, 8% an associate, and 86% a bachelor's degree. Of those who earned a bachelor's degree, 56% were metro and 46% nonmetro. Of those who obtained an associate degree, 24% were metro and 76% were nonmetro. Of those who gained a vocational certificate, 9% were metro and 91% were nonmetro.

Figure 4. Type of Degree Attained by NMU Fall 2011 Cohort

Degree Changes

While 75% of students in the cohort entered seeking a bachelor's degree, 86% of those

who completed a degree obtained a bachelor's. Of the 128 students who entered college seeking

an associate's degree, 59% had completed a bachelor's degree by the date of this study. This

shift accounts in part for the increased number of bachelor's degrees earned versus associate

degrees earned. The location of origin of students who entered seeking an associate degree and

gained a degree at NMU is heavily weighted toward nonmetro students, with 97 nonmetro

students, and 31 metro students. Degree changes more heavily effected metro students than

nonmetro students. Of the metro students who graduated who enrolled seeking an associate

degree, 84% went on to obtain a bachelor's degree instead. Only 51% or nonmetro students who

enrolled seeking an associate earned a bachelor's degree.

Degree Sought	Degree Obtained	Number of Total Graduating Students	Number of Graduating Nonmetro Students	Percent of Graduating Nonmetro Students	Number of Graduating Metro Students	Percent of Graduating Metro Students
Certificate	Certificate	33	32	4%	1	.1%
Certificate	Associate	2	2	.2%	0	0%
Associate	Associate	41	38	4%	3	.3%
Associate	Bachelors	75	49	6%	26	3%
Associate	Certificate	12	10	1%	2	.2%
Bachelors	Bachelors	669	275	32%	394	45%
Bachelors	Associate	23	10	1%	13	1%
Bachelors	Certificate	13	11	1%	2	.2%
Total:		868	427	49%	441	51%

Table 2. Changes in Degree Sought to Degree Obtained by the 2011 Cohort

Time to Completion

While in other areas of this study I have included all degree levels in the success metrics, time to completion data is traditionally factored to a baccalaureate degree cycle. For clarity in the time to completion question I chose to follow convention and look only at the students in the cohort who completed baccalaureate degrees. Since the institution studied is a traditional four-year university, students graduating with a bachelor's degree were a majority of the graduating students. Of the 868 (50%) students from this cohort who completed a degree, 744 (86%) of them obtained a bachelor's degree. The time to completion data is based on these 744 students.

Semesters at the institution studied are composed of fall semester from August to December, winter semester from January to May, and summer semester from May to August. Traditionally, students attend fall and winter semesters and take the summer off; however some students attend all year, and there is a summer graduation option. In order to keep from counting summer semesters, when many students do not enroll, as time spent at school I chose not count summer semesters in the semesters to completion count. To maintain consistency, I combined

the summer graduates in the fall semester graduation count. The count of number of semesters to graduation can be seen in the time to completion graph (figure 5). For reference, there is also a chart of the number of graduates including summer semesters in Appendix B.

Baccalaureate students from this cohort began completing degrees in May of 2013. The number of graduating students was 427 (49%) nonmetro and 441 (51%) metro. The majority of the cohort graduated in May of 2015, December of 2015, and May of 2016. It is interesting to note that while in other semesters the number of nonmetro and metro students are often even, in the high graduating semesters a trend emerges. The first semester to show this trend is fall semester of 2014. In that semester, 29 students graduated from this cohort; 22 of those students were metro, while only 7 were nonmetro. In the winter semester of 2015, 270 total students, the largest group from this cohort, graduated; 159 of those students were metro students, and 111 were nonmetro. In the fall semester of 2015 this happens again. Of the 131 students to graduate, 84 were metro and 47 were nonmetro. Only at the end of the high graduation semesters do the nonmetro students overtake the metro ones. In the winter graduation for 2016, 137 students graduated; 64 metro students, and 73 nonmetro.

Semester	Semester Count	Metro Graduates	Nonmetro Graduates	Years
Winter 2013	4	0	1	2
Fall 2013	5	1	0	
Winter 2014	6	8	2	3
Summer 2014		1	1	
Fall 2014	7	22	7	
Winter 2015	8	159	111	4
Summer 2015		19	13	
Fall 2015	9	84	47	
Winter 2016	10	64	73	5
Summer 2016		8	20	
Fall 2016	11	21	20	
Winter 2017	12	17	17	6
Summer 2017		2	0	
Fall 2017	13	9	7	
Winter 2018	14	5	5	7

Table 3. 2011 Baccalaureate Cohort Semester of Graduation

In the traditional time to completion scale of four years, 313 students graduated with a bachelor's degree. Of the metro students who obtained a degree, 46% graduated in four years. Of the nonmetro students who obtained a degree, 38% did it in four years. At the five year finish mark, the ratio remained nearly the same, with 85% of metro students and 79% of nonmetro students finishing in 5 years. However, when the maximum time to complete (six years, or 12 semesters) is figured, the rates of completers evened out dramatically; 96.2% of the metro students and 96.3% of the nonmetro students who gained a degree did it within 6 years.

The difference in degree completion times was found to be significant. An independent t-test value was conducted to compare the number of semesters for metro students to graduate and the number of semesters for nonmetro students to graduate. There was a significant difference

between completion times for metro students (M=9.02, SD=1.499) and nonmetro students

(M=9.36, SD=1.494); t(419,323)=1.021, p=0.0027.
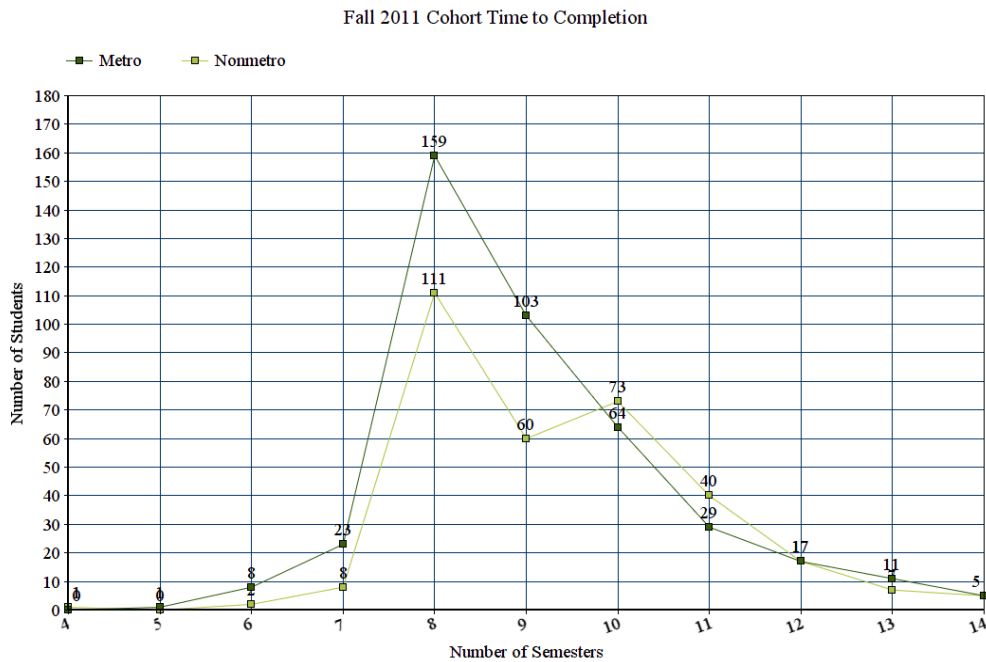
Figure 5. NMU Fall 2011 Baccalaureate Cohort Time to Completion

Limitations

This study is limited by sample size and the lack of comparative data from other

institutions. Rural students are not counted as such at American universities. As a result, data

from after their first year of college is very limited and usually only recorded in studies done on

sample populations (like this one), or qualitative studies that focus on the experiences of a small

group. Nonmetro institutions have fallen into the same research gap as nonmetro students. While

the National Center for Education Statistics tracks the location and completion rates of rural K-

12 school districts, they do not compile data on rural postsecondary institutions. Most of the averages and generalizable data about rural students considers them as such based on their K-12 school district location, rather than their personal location of origin. A much larger, national sample would offer generalizable data in a way that a one-cohort sample cannot.

One component of the study involved graduation rates. All studies of retention and graduation in the United States are hampered by the ability to track students throughout their postsecondary career. Since universities in the U.S. do not operate as one entity, it is difficult or impossible to track students who transfer institutions during their student career. A student who is seen as a non-completer could simply have transferred to another institution and finished there. However, the retention and completion rates across the country suffer from this recording problem; the data presented in this study was collected under the same restraints as other widely publicized data.

There is an external validity threat to data sets of specific groups. When the researcher has studied the research on a group, it is possible to read into data in a way that validates prior research or opinion. Since this study was conducted on an aspect of rurality that is rarely studied, it would follow that more studies on rural-urban codes and persistence are needed to validate the data. Institutions at all levels of the rural-urban continuum should be researched to see if the results hold for different schools and location settings.

CHAPTER 5: DISCUSSION

Degree Completion

Even though this data includes students completing any level of degree, the nonmetro and metro graduating percentages are not equal to the enrollment ratio. Nonmetro students made up 52% of the incoming class, but only 49% of the graduating numbers. Metro students were 48% of the incoming class and were 51% of the graduating students. While this is not a large change, it does reflect that more nonmetro students than metro failed to complete a degree; 54% of the nonmetro students who enrolled did not graduate, while 46% of metro enrollees did not graduate. This signifies that nonmetro students who enrolled experienced circumstances after beginning college that caused them to stop attending that metro students did not. More in-depth research is necessary to explore the reasons that nonmetro students stopped attending, however, prior research at other institutions indicates that issues of belonging and identity are significant contributors to rural students leaving college (Crain, 2018; Rains, 2009; Guiffrida, 2008; Lehman, 2007; Maltzan, 2006; Dees, 2006).

GPA

The graduating grade point averages for metro and nonmetro students was 2.99 and 2.98, respectively. This very close average is an indication that metro and nonmetro students are performing academically similarly at this institution. This supports the narrative that nonmetro students are as academically prepared as their metro counterparts for the rigors of college. Rural students have an 80% high school graduation rate, high standardized test scores, and comparable GPAs to their metro counterparts (NCES, 2013). The University of California system found that their rural students were entering college with GPAs, coursework, and AP credits that were

similar to those of their metro students (University of California Institutional Research and Academic Planning, 2018). Nearly identical GPAs between the metro and nonmetro students in this study implies that other success metrics that show metro students persisting at higher rates than nonmetro students are not a result of the academic rigors of college but come from some other source.

Time to Completion

The data showed an inequality in 4-year completion times, with 37% of nonmetro students graduating in 4 years and 45% of metro students doing the same. The difference in completion times was found to be significant. Nonmetro students who obtained a bachelor's degree at this university took longer to graduate than their metro peers. The literature on rural time to completion is fragmented. There is little data about rural student completion because only enrollment and first year persistence are generally measured. An extended time to completion could mean that rural students were working a considerable number of hours while attending school, may be caring for family members, or are hampered by the financial cost and opportunity of large class loads.

Traditional university structure rewards students who are living on or near campus and have free time to take large class loads. Classes are held at a range of times throughout the day, which can make large class loads difficult to schedule for commuter students. As higher education transitions to a new age of technological learning, some universities are restricting whether students can take a mix of online and on-campus classes. For non-traditional, commuting, and working students, these restrictions can be barriers to their ability to attend school in a way that suits their lifestyle, causing later completion times or possibly non-completion.

Degree Sought

The types of degrees sought by students enrolled in the 2011 fall cohort fall along metro and nonmetro location of origin lines. While the incoming numbers of the students enrolling were 52% nonmetro and 48% metro, the degree declarations of incoming students did not mimic this half and half ratio. The metro students overwhelmingly were enrolled in bachelor's degree tracks. Only 12% of metro enrollees took an associate or vocational track, while 37% of nonmetro enrollees entered seeking an associate or vocational degree. Nonmetro students nearly made up all of the associate and vocational seekers. The finding that less nonmetro students are seeking and gaining a four-year degree is in line with the finding that the gap between the percentage of adults with bachelor's degrees in rural and urban areas is widening with time (Marre, 2014).

These numbers fall in line with current research that finds that rural students have lower educational aspirations than metro students (Marre, 2014; USDA economic research service, 2013). The reasons for this are varied; from lack of educational role models (Byun et al., 2012; Andres & Looker, 2001), lack of knowledge of the higher education system (Crain, 2018; Rains, 2009), the knowledge that higher degrees are not always paths to careers and higher income in rural areas (Marcus & Krupnick, 2017; Ali & Saunders, 2009; Gibbs, 1995), or the belief that rural students are not competitive in higher education (Crain, 2018; Koricich, 2013). Rural students may be falling short of their potential by not seeking bachelor's degrees. Students coming from rural schools experience socialized messages about the types of careers that are open to them and can be pushed down vocational pathways when they are actually academically inclined (Crain, 2018; Pappano, 2017a; Lucas, 2011).

Declared Degree Changes

The percentages of students who entered Northern Michigan University seeking an associate degree versus those who obtained a bachelor's by the end of their studies show a marked difference. Of those who changed degrees, 86% of metro students and 51% of nonmetro students who enrolled seeking an associate or a vocational degree declared and received a bachelor's degree instead. It is heartening that so many students who began higher education in pursuit of an associate or vocational degree found that they were capable of and encouraged to instead seek a bachelor's, but it is unclear why the percentage was much higher for metro students than it was for nonmetro students.

This begs the question what types of messages students in college receive. It is possible that there is an implicit bias that causes university faculty and staff to encourage metro students to pursue higher degrees while not giving that same encouragement to their nonmetro counterparts. This concept was raised by Posselt, who discussed the "gatekeeper" mentality in higher education and the way that those in academia conceptualize, assess, and act out their vision of who is a "fit" for college and those who are not (Posselt, 2016). Attributes such as dress and manner of speech are cultural clues used to place others in a culture and measure their ability to succeed. Nonmetro social habitus is dissimilar to metro habitus and may cause judgements to be made about nonmetro academic abilities based on their lack of 'fit'.

It is also possible that the number of nonmetro associate students is skewed by the function of a university in a nonmetro location. Northern Michigan University serves the role of a community college for local nonmetro students. Local nonmetro students attend for associate and certificate degrees because it is available and attainable to them while remaining at home. Students in metro areas do this as well, but usually by attending a community college before they

transfer to a four-year institution. Students tend to not travel far for a certificate or associate degree if they are able to get one closer to home (Williams & Luo, 2010). It is possible that this may account for the very significant differences in nonmetro versus metro students enrolled in associate and certificate degrees. Students are also known to use mid-level universities and colleges as an entry into higher education with the intention of applying to a larger, more selective institution after a few semesters.

Data Overview

The data obtained from this cohort confirms a number of the research findings that rurality scholars have published regarding nonmetro students. The National Center for Education Statistics found that rural students are graduating high school with comparable grades and knowledge as their metro counterparts. The students in this study who completed a degree had similar GPAs, with the metro and nonmetro student averages not statistically different. Northern Michigan University, as a nonmetropolitan institution, had an incoming cohort of 52% nonmetro students. Nationwide, nonmetro students make up 29% of the college population (NCES, 2013). Nonmetro students attending this institution would have other nonmetro students in their classes and on campus in a significant number. This would likely ease some of the identity and belonging stresses that accompany rural students beginning in higher education.

Other factors did not come out in nonmetro students' favor. The time to completion data showed that nonmetro students took significantly longer to graduate than their metro peers. The numbers of students who did not complete a degree show that 54% of nonmetro students who enrolled were not successful. Only 46% of metro students were unsuccessful. Nonmetro students also overwhelmingly dominated associate and vocational degrees, while metro students sought bachelor's degrees. While it was good that many students who began college seeking an

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associate or vocational certificate chose to get a bachelor's instead, the percent of metro students who made this switch was higher than the nonmetro students who did. The degree level information supports research that there is a difference between the higher education communications that nonmetro and metro students receive both in and before attending college (Crain, 2018; Koricich, 2013, Lucas, 2011; Dees, 2006).

Recommendations

Rural location of origin needs to be tracked in the same way that first-generation status has been tracked in post-secondary institutions. Identifying rurality as a trait of incoming students would allow institutions to offer targeted support to rural students. It is likely that identity and belonging shifts are a factor in low persistence and retention rates among nonmetro college students since academic preparedness does not seem to be a significant cause. Once nonmetro students are identified, universities and colleges should offer additional career counseling to rural students to help identify the opportunities available and the level of education they need to attain them.

Higher education institutions should examine the ways that their class schedules and offerings effect nonmetro students and may contribute to nonmetro students finishing their degrees later than their metro counterparts. Rural students may not be seeking bachelor's degrees at the same rates as metro students because they do not have life experience with higher level degrees and their career applications.

As it transitions to identifying and supporting nonmetro students, higher education must reexamine the rural narrative and create one of belonging and worth on campuses in order to retain and support their rural students. Guiffrida (2008) suggests that expanded counseling

services in both high school and college would have a positive effect on rural student college enrollment and retention. Increased identification of and attention to rural students entering universities would be a plausible first step toward creating an environment in which they have the tools to thrive. The biggest obstacle to implementing these changes would be institutional funding and staffing (Lapan et al., 2007). Portions of the change of habitus that is experienced by nonmetro students at metro universities could be relieved by nonmetro students attending institutions in nonmetro areas or accessing higher education online.

Areas for Further Research

Nonmetro Student Identification

The lack of data about nonmetro students as they move through the higher education system is typified by the fact that there is currently no accurate count of nonmetro students in higher education. The National Center for Education Statistics reports that 29% of students entering higher education come from rural K-12 school districts (2013), however, the NCES's designation of a rural school district is different from the rural and nonmetro designations used by the U.S. Census Bureau and USDA. Colleges do not report student or institutional rural designation as part of their Integrated Postsecondary Education Data System (IPEDS) report. In order to use the data from this study to compare with other student sets, such as nonmetro students at metro universities or metro students at metro universities, location of origin must be identified as a student attribute.

Contributing Student Factors

As post-secondary institutions begin to identify and support nonmetro students, ascertaining the reasons for nonmetro student stop-out and drop-out will become necessary.

Quantitative analysis can only begin to illuminate the experience of rural students entering higher education. There are many internal and external factors to student's choices that enrollment and completion data cannot capture. A qualitative study on the students in this cohort would correct for some of the limitations to the data, such as institutional transfers, reasons for stopping out or dropping out, and career aspirations. This dataset also did not include how many classes students were enrolled in for which semesters, or the semester when the non-completers stopped taking classes. Prior research has suggested that nonmetro student drop-out often comes at the end of the first semester (Markus & Krupnick, 2017; National Student Clearinghouse, 2013; Williams & Luo, 2010). It would be interesting to explore whether this trend holds true for this cohort at a nonmetro institution. The numerical data from this study requires context in order to be used in student support and counseling. Qualitative investigation would provide valuable information about the reasons for the data trends that emerged in this study.

Other Salient Student Traits

Rural populations are often discussed as white, blue-collar, and conservative, however, rural culture is not monolithic. Students who are identified as rural come from different socioeconomic, racial, ethnic, and political groups. Rural locations differ from each other in population type, economic base, and cultural outlook. Rural research is often associated with agricultural communities, however, the nonmetropolitan locations do not always have an agricultural economic base. Regions that are heavy in natural resources or that have tourism-based economies have unique contributing cultural capital that shapes the habitus of students from those areas. The lived experiences of a rural student from Kentucky is different from that of a student in Mississippi, and both are different from the experiences of a student from New

Mexico. To really assess the needs of individual populations, separate studies would be needed for each one.

This study was conducted in an area and at a university that is predominantly White. An institution with a more diverse population would yield better data on racial differences. Much of the scant body of rural higher education research has focused on White populations. However, there are large populations of rural Black, Hispanic, and Native American students who enter higher education with both a rural identity and a racial identity that can contribute to identity and belonging conflicts.

Student Type and Institution Type

One way to test the effect of belonging on student success would be to examine whether students from counties in the Rural-Urban Continuum Code that are similar to the institution they are attending are more successful than students who attend an institution that is located in a county that is different from their location of origin county. For example, if a school is located in a seven designated county, do students from five, seven, and nine (nonmetro counties that are far from population centers) have a better success rates than students from other, more unalike counties? I was interesting in looking at this question in this study, but the number of students in the data set for each country designation was too small to obtain significant statistics.

This study focuses on the influences on nonmetro students at a nonmetropolitan university. Institutional location is a significant factor. When belonging and identity are examined, university location must be addressed. It has been largely ignored in rurality research. The differences between nonmetro student success rates at nonmetro institutions should be compared to those at metro institutions. In a first step to accumulating data on rural success at

institutions in different locations, post-secondary institutions must be identified by location. Using the Rural-Urban Continuum to designate institutional level of rurality would help to determine the effect of location on students. Additionally, the success of metro students at nonmetro institutions should be examined. If identity and belonging research is accurate it would be expected that any student who makes a drastic change from their location of origin would experience cultural conflict during the transition.

CHAPTER 6: CONCLUSION

This thesis analyzed the success rates of metro and nonmetro students at a nonmetropolitan university. Many quantitative data aspects were explored in order to provide a comprehensive picture of the outcomes of the academic journey of the cohort studied. Enrollment data for this group showed that an above average number of nonmetro students choose to attend a nonmetro university. The experience of nonmetro students exemplified some of the concerns that have been found in rural student literature. Nonmetro students in this study took longer to graduate than their metro peers. They also sought bachelor's degrees at lower rates than metro students. Nearly all of the vocational students' location of origin was a nonmetro county. The percentage of nonmetro students who did not complete a degree was 8% higher than the percentage of metro students who did not finish. Academically, nonmetro students and metro students graduated with grade point averages that were not significantly different, signifying that discrepancies in student retention and graduation were not due to lack of academic ability or preparedness. Previous literature on nonmetro students studying at a nonmetro university is limited. This study provides a basis of information that can be used by future researchers to compare and contrast cohorts attending different institutions in different locations.

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Table 4. Degree Obtained between August 2011 and May 2018

Degree	Nonmetro Students	% Nonmetro Graduates	Metro Students	% Metro Graduates	Total Students	Total Percentage
Bachelors	324	37%	420	48%	744	86%
Associate	50	6%	16	2%	66	8%
Certificates	53	6%	5	.06%	58	6.6%

Figure 6. Fall 2011 Baccalaureate Cohort Time to Completion by Semester

NMU Fall 2011 Baccalaureate Cohort Time to Completion by Semester