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A Study of a High School Intervention Program to Increase Access to Higher Education

by Erin Nicole Davis

An Applied Dissertation Submitted to the Abraham S. Fischler College of Education in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

Approval Page

This applied dissertation was submitted by Erin Nicole Davis under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

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Statement of Original Work

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Abstract

A Study of a High School Intervention Program to Increase Access to Higher Education. Erin Nicole Davis, 2018: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education. Keywords: college access, higher education, first-generation students, rural students

This applied dissertation was designed to determine the effectiveness of a college access program created to improve college application and acceptance rates for underserved students. The program is targeted toward low-income, first-generation students, many of whom are minorities and reside in a rural area. The schools that the students attended have school counselors, but due to limited resources and other challenges, students often did not receive significant information about access to higher education. Since many students were the first in their family to attend college, they relied on information from the school to help them navigate the process.

This study utilized a quantitative research methodology with survey research design to gain a comprehensive understanding of implementation and programmatic effectiveness. The researcher used a survey instrument based on the Milwaukee Public Schools Senior Exit Survey that was validated and tested for reliability by two or three experts in the field. The participants were rural, first-generation, low-income, minority students.

The results of research question 1, "What was the impact on college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member?" are that the impact of college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member is increased due to student engagement in postsecondary planning activities related to college enrollment with their college adviser.

The results of research question 2, "How have the gains from students affected by the presence of the Carolina College Advising Corps in this rural county been sustained?" are that the gains from students affected by the presence of the Carolina College Advising Corps in this rural county have been sustained by increased planning to enroll in college immediately following high school graduation.

The researcher recommends further research on postsecondary counseling in high schools to gain more understanding regarding the depth to which this is taking place. The researcher also recommends additional research regarding school counseling strategies that support students in pursuing and attaining higher education.

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Chapter 1: Introduction

Statement of the Problem

A stereotype that exists within the field of education is that students who attend rural high schools are less likely to graduate from high school as are their urban counterparts. This is largely untrue. However, what is true is that rural students do not aspire to or plan for college to the same extent as students in nonrural areas (Tieken, 2016). In many schools in rural areas, the conversations taking place related to college and other postsecondary options centers is job-oriented and focused on career potential. For many rural students, the decision to pursue college can be unnerving and overwhelming, as the decision does not just impact their future, but their families' future as well (Tieken, 2016). Thus, at the core, the problem is that students at rural high schools are not applying to or being accepted at 4-year colleges and universities.

The setting for this research is in North Carolina in the northeast corner of the state, just south of the Virginia border. The county is geographically large, with a low-density population. Data from the U.S. Census Bureau (2013), reported that the county is just over 724 square miles, with about 75 persons per square mile, and a total population of 54,691 people as of the 2010 Census. The county presently maintains three separate school districts which serve 8,000 students.

Many students who matriculate through the high schools in the county are both low-income and first-generation students. According to Census data, the median household income in this county from 2007-2011 was \$31,370 (U.S. Census Bureau, 2013). Further data from the U.S. Census Bureau (2013), indicated that 24.1% of the

population was below the poverty level and 11.5% of the population age 25 and older had obtained a Bachelor's degree or higher.

The process of preparing for college consists of not just applying to college, but researching and visiting potential colleges. Students who are low-income and/or first-generation may lack resources to assist them in this process (Bryant & Nicolas, 2011). Furthermore, students with parents who did not attend college or who have very few family members who are college graduates may find themselves at a disadvantage in receiving assistance and support in the college preparation process. This is particularly relevant for students in rural areas, many of whom do not have a person in their family who attended college.

There are several counties in North Carolina who benefit from the Carolina College Advising Corps, which is a part of the College Advising Corps. With headquarters located at the University of North Carolina at Chapel Hill, the College Advising Corps "works to increase the number of low-income, first-generation college and underrepresented high school students who enter and complete higher education" (College Advising Corps, 2014, para. 1). The College Advising Corps (2014) plans to accomplish this by "placing recent graduates of partner institutions as college advisers in low-income high schools and community colleges...to provide the advising and encouragement that students need to navigate college admissions" (para. 2). The mission of the Carolina College Advising Corps, the group that directly services Halifax County high schools, is to help "low-income, first-generation, and underrepresented students find their way to colleges that will serve them well" (Carolina College Advising Corps-Advising Corps, 2011, para. 1). The Carolina College Advising Corps plans to

accomplish this by helping "students to identify and apply to post-secondary programs that will best serve them both academically and socially" (Carolina College Advising Corps- Advising Corps, 2011, para. 1).

The numbers from rural counties in North Carolina indicate the necessity of programs such as the Carolina College Advising Corps. In 2015, just 54% of public high school graduates from one rural county applied and earned acceptance to at least one University of North Carolina system institution (University of North Carolina General Administration, 2015).

The topic. In some areas, going to college is a rite of passage—an expectancy of scholastic attainment. Students have parents and other family members who have attended college and they understand, from an early age, that attending and graduating from college is possible in their future. Unfortunately, this does not happen everywhere. There are many communities where just graduating from high school exceeds expectations. For students in these communities who desire to attend college, navigating that path can be difficult. Students often struggle with understanding how to get to college, as well as understanding the costs associated with college. Students also face challenges socially by desiring to challenge the norms that exist in their community. In order for these students to overcome these obstacles, it is important for them to have access to the appropriate information. To date, there exists many college access programs designed to provide this information and bridge the gap for these students; however, there is not substantial research that explains the effectiveness of these programs, specifically regarding increasing students' college application and acceptance rates.

As the United States has become more advanced, there has been a greater need for those entering the workforce to attain a postsecondary degree. Jobs that previously only required a high school diploma are now requiring a college degree. Furthermore, the jobs that do not require a college degree often do not pay a living wage, thus making it difficult for those employees to provide for their family. These challenges are especially prevalent in low-income areas and are further compounded in rural areas. The college degree has become the ticket to the middle class and the easiest way for people to be upwardly mobile. The Pew Research Center's Report "The Rising Costs of Not Going to College" explains that college graduate millennials, ages 25-32, earn about \$17,500 more annually than similarly aged adults with just a high school diploma (2014). In order for this mobility to become a reality, there must be an understanding of any barriers that hinder access to a college degree and how to actively work to eliminate those barriers.

The research problem. There is research available that explores college access programs which intend to increase the college application and matriculation rates, and how those programs adapt their services to meet the needs of the population they serve (Glennie, Dalton, & Knapp, 2015). This research does not include specific information regarding the unique challenges faced by low-income students of color in rural areas attempting to navigate the college application and financial aid process. There, specifically, needs to be a body of research that examines the operation of such programs and how to evaluate their success. Therefore, the problem is that the effectiveness of counseling intervention programs in rural areas designed to assist low-income students of color in the college application and financial aid process have not been evaluated for their effectiveness.

Audience/stakeholders. This research will be beneficial for high school counselors, particularly those in rural areas. This research will also be useful to helping counselors understand barriers to access issues related to first-generation college students, students of color, or low-income students. Finally, this research will add to the growing body of knowledge concerning what is necessary to improve college application and acceptance rates for students.

Program

Schools are challenged with the task of providing an education to students that prepares them for both college and a career. While schools often strive to provide the academic support necessary for students to be prepared for college and career, they sometimes neglect the social support necessary for students to pursue college. Because of student to counselor ratios within high schools, in addition to an increasing amount of administrative work, counselors struggle to provide adequate college information to all students. The American School Counselor Association national model recommends that, for maximum effectiveness, student to counselor ratios should be 250:1 and that at least 80% of counselor time be spent in service to students, despite research indicating that the national average student to counselor ratio is 470:1 (American School Counselor Association, 2012; Carey & Dimmitt, 2012). While programs such as Upward Bound and AVID have been successful at increasing college knowledge and awareness to a specific demographic of students, they are not an alternative to counseling (Pitre & Pitre, 2009).

With concerns about the current counseling model in place, which emphasizes one-on-one help at the student's request, there has been increasing attention given to the "coaching" model. Though there is variance in coaching programs, the approach and

application are generally the same: an advisor is assigned to a particular high school to work with staff and assist students in non-academic tasks necessary to navigate the college application process (Stephan & Rosenbaum, 2013).

The College Advising Corps is one of the largest programs utilizing the coaching model, and they have experienced rapid growth and currently provide services in 13 states (Stephan & Rosenbaum, 2013). As the College Advising Corps and similar programs continue to grow, it is important to evaluate programmatic effectiveness to see if the program is meeting its objectives.

College Advising Corps program is staffed by recent college graduates from their partner colleges who are committed to serving as full-time college advisers in high schools across the United States. These college advisers help students navigate the path to college in a variety of ways, such as assisting with the Free Application for Federal Student Aid (FASFA) and helping students secure fee waivers for college admissions exams such as the SAT or the ACT. Participation in the program is a two-year commitment, with advisers starting shortly after their college graduation with preplanning and professional development to help them acquire knowledge related to college admissions and financial aid. In the 2015-16 academic year, there are 532 advisers actively working in 531 high schools in 14 states.

Purpose of the Study

The purpose of the study was to determine the effectiveness of a rural high school counseling intervention program designed to increase college application and acceptance rates. Specifically, this study assessed the effectiveness of the Carolina College Advising Corps chapter of the National College Advising Corps located in Halifax County, North

Carolina. A quantitative research methodology with survey research design was used to address the research questions.

Definition of Terms

College application rate is "the ratio of graduating students applying to college to total graduating students" (Morse & Flanigan, 2009, p. 1).

College acceptance rates refer to "the ratio of students admitted to applicants when considering four year colleges or universities" (Morse & Flanigan, 2009, p. 1).

First-generation student is defined as "the first person in the immediate family to attend college; highest degree attained by either parent was a high school diploma equivalent or less" (Balemian & Feng, 2013, p. 3).

Chapter 2: Literature Review

Introduction

There are many challenges that students encounter in the college application and financial aid process. Understanding deadlines and admissions requirements, as well as navigating financial aid can be difficult. This process is even more difficult for students who are low-income, whose schools may not have resources to provide them to assist in the process; for students who may be the first in their family to pursue post-secondary education; or for students who live in rural areas. This literature review will include information under the headings of (a) Understanding postsecondary challenges for rural students (b) Defining and understanding first-generation students, (c) The role of family members, (d) High school counselors—The gatekeepers and sources of capital, (e) Understanding college access programs, and (f) Federal programs aimed at increasing college enrollment.

Understanding Postsecondary Challenges for Rural Students

Many of the challenges students face in pursuing postsecondary education are compounded for those who live in rural areas. Furthermore, rural students do not aspire to or plan for college at the same level as students who do not live in rural areas (Tieken, 2016). Rural areas have traditionally been dominated with trade-based economies such as farming or manufacturing that have not required postsecondary education (Tieken, 2016). The decline in these industries not only affects the economy of the rural community, but also forces students into a position of uncertainty, as the jobs within the industries they were previously expected to enter are being eliminated, or have already been eliminated (Tieken, 2016). As students prepare to transition into the next phase of life, schools may

be uniquely positioned and essential in helping students navigate these changes (Irvin, Byun, Meece, Reed, & Farmer, 2016).

The students living in rural areas come from diverse backgrounds when considering race, ethnicity, and socioeconomic status (Irvin, et al, 2016). While many youth who reside in rural areas live in poverty, there are higher rates of rural youth in poverty amongst those who are African American, Hispanic/Latino, or Native American (Irvin et al, 2016). Indeed, "the largest populations of students eligible for free or reduced-price lunch in rural schools are from racial/ethnic minority backgrounds" (Irvin, et al, 2016, p. 179).

Though the challenges of industry and socioeconomic status make it difficult for students from rural backgrounds, it is not impossible for them to pursue postsecondary education. If students are given the opportunity to enroll in advanced courses or complete a college preparatory course of study, that can bolster their academic achievement while also playing a role in their educational aspirations (Irvin, et al, 2016). Additionally, having high quality teachers with high expectations and positive beliefs about their abilities can also positively impact their educational aspirations (Irvin, et al, 2016).

Defining and Understanding First-generation Students

A variety of definitions exist for first-generation students. While some define first-generation students as those whose neither parent nor guardian has obtained a bachelor's degree, others define first-generation students as those who are in the first-generation of their families to go to college ("First-generation Students," n.d.). For the purposes of this paper, the researcher defines a first-generation student as, "the first

person in the immediate family to attend college; highest degree attained by either parent was a high school diploma equivalent or less" (Balemian & Feng, 2013, p. 3).

The researcher chose to utilize this definition because of the belief that those who have parents who have engaged in some form of postsecondary education are able to provide a benefit to their children, regardless of whether or not they complete it. For those who pursue postsecondary education via community college, technical school, or trade school, there is a value added that they may share with their children. However, those experiences still do not fully encompass the challenges that students may face academically, socially, culturally, and emotionally at a four-year institution. To fully assess the challenges of a first-generation student, the researcher contends that it is best to examine those who have no family history of obtaining a bachelor's degree.

First-generation students are becoming a larger part of the college population. According to Mehta, Newbold, and O'Rourke (2011), first-generation students are nearly 50% of today's student population, and their numbers are increasing. These students enter college having less knowledge about the college experience and often struggle to acquire financial aid necessary to pay for school (Unverferth, Talbert-Johnson, & Bogard, 2012). Though characteristics of first-generation students vary widely, they are most commonly from racial/ethnic minority backgrounds and families with lower incomes, and are lacking support and encouragement from their families to pursue postsecondary education (Unverferth et al., 2012). Some first-generation students may feel pressure to enter the workforce immediately following high school and they may have fears and misconceptions about what college entails, as well as the cost to attend college ("First-generation Students: Counseling First-generation," n.d.).

Typically, first-generation students have difficulty gaining access to a college education, as well as difficulty completing one. Since first-generation students did not grow up around adults who have completed college, they lack information that can provide preparation and support as they matriculate through college (Mehta et al., 2011). The unfamiliar landscape of college, combined with the lack of parental knowledge and support creates situations where many first-generation students are not equipped with the skills or knowledge necessary to succeed in college. This leads to increased stress among first-generation students and affects their ability to be involved on campus, both of which are factors that can lead to decreased academic performance and increased college dissatisfaction (Mehta et al., 2011). When considering the challenges that first-generation students face, it should be of no surprise that first-generation students have a lower graduation rate than that of continuing generation students (students who have at least one parent or guardian who completed college (Mehta et al., 2011; Unverferth et al., 2012).

Cost-Benefit Analysis of Attending College

A primary reason that low income students and students of color have lower rates of college attendance is because of their uncertainty of the economic and social benefits to attending college. This uncertainty is fed by the fact that many low income students and students of color fail to have role models from similar backgrounds who can attest to the increased economic opportunity that a college education provides. While many of these students aspire to attend college, after being exposed to people within their community where postsecondary education did not provide a significant economic impact (Bergerson, 2009), their aspirations changed. The same applies for students in rural areas,

who have encountered many people who have achieved a level of financial comfortability through trade and agricultural economies without having to pursue higher education.

However, low income students and students of color are not the only people who are raising questions about the value of a college education. Rising college costs, coupled with increasing student loan debt has caused the general public to begin evaluating the value and necessity of a college education. Despite this questioning, research indicates that there is value in earning a college degree. In the Pew Research Center's Report "The Rising Cost of Not Going to College" (2014), they explain that in nearly all measures of financial well-being and career attainment, young college graduates outpace their peers with less schooling. Furthermore, when comparing today's young adults to previous generations, the economic gap between college graduates and those with a high school diploma or less has never been greater (Pew Research Center, 2014, p. 3). When considering millennials, who were employed full time during 2012, the median annual income of college graduates was \$45,500 (Pew Research Center, 2014). This is drastically different than the median annual income of millennials with only a high school education, who, in 2012, made \$28,000 (Pew Research Center, 2014). Furthermore, while earnings for those who had received a college degree increased, the Pew Research Center found that for an average high school graduate, their income decreased by over \$3000 (Pew Research Center, 2014). Also, when considering wages, a bachelor's degree pays substantially higher than a high school diploma over a lifetime on average, \$230,000 to more than \$500,000 more than the wages received from a high school diploma over the course of one's' life; depending on the institution one attended (Klor de Alva & Schneider, 2011). The disadvantages of not earning a college degree are

not just correlated with earnings, but also with employment. Those without a college education are "more likely to be unemployed and they are spending more time searching for a job" (Pew Research Center, 2014, p. 16). While there are arguments that the United States is producing more bachelor's degree recipients than is necessary, the labor market indicates a strong demand for such people (Klor de Alva & Schneider, 2011). Even when certain job skills do not necessitate a bachelor's degree, an applicant having a bachelor's degree signals several characteristics that employers value (Klor de Alva & Schneider, 2011).

Though there is much concern about rising tuition costs, research indicates that the return on investment for a college degree has, for more than ten years, been around 15 percent, easily exceeding the standards for sound investments (Abel & Deitz, 2014).

Though the sticker price of college has risen, the net cost, or that which is paid after accounting for financial aid students receive that does not need to be paid back, continues to be significantly lower (Abel & Deitz, 2014).

Utilizing the internal rate of return, a formula used by investors to calculate the economic value of investments, Abel and Deitz (2014) found that on average, college completers receive a good return on their investment. In more specific terms, the return to bachelor's degree has hovered between 14 and 15 percent for the past decade; while the return to an associate's degree has ranged between 13 and 15 percent (Abel & Deitz, 2014). When considering that investing in stocks and bonds has yielded an annual return of 7 percent and 3 percent, respectively, it becomes clearer that the return on college makes it a good investment (Abel & Deitz, 2014).

Within the conversation around the return to college is a consistent question of, "does your major matter?" A more specific question in regard to this is, "Are all college degrees equally good investments?" Abel and Deitz (2014) found that, "training that focuses on quantitative and analytical skills—earned the highest return; engineering majors and math and computer majors are cases in point, with rates of return of 21 percent and 18 percent, respectively" (p. 7). There are other majors that enjoy a return that is higher than the average. For example, "health majors also earned an above-average return…business majors also rank relatively high" (Abel & Deitz, 2014, p. 7).

Conversely, liberal arts majors (specifically leisure and hospitality, education, and agriculture and natural resources) all have returns that are below average (Abel & Deitz, 2014). Despite this fact, the return to college continues to be, on average, a good investment, because each major has a rate of return that exceeds 9 percent (Abel & Deitz, 2014).

There are societal benefits associated with having a more educated population. Specifically, college-educated adults tend to be more civically engaged, are healthier, and live longer (Klor de Alva & Schneider, 2011).

Addressing the Cost of College

There are widespread concerns about the increasing cost to attend college. In previous years, states discounted a higher portion of college costs, thereby giving a smaller portion of the costs to families (Goldrick-Rab, 2016). In the past, about three-quarters of the operational budget for public colleges and universities came from state funding appropriations (Goldrick-Rab, 2016). Today, those same public colleges and universities receive around 50 percent of their operating budgets from state

appropriations (Goldrick-Rab, 2016). The change in funding directly affects those pursuing a college education. As the state appropriations decreased, the costs to an individual increased (Goldrick-Rab, 2016).

When considering the "cost of attendance", the official sticker price for a college or university, federal law mandates what is included; items such as tuition, fees, books, supplies, and transportation (Goldrick-Rab, 2016). However, this calculation of sticker prices fails to address two critical factors for low income students: opportunity costs of attending college as well as other costs incurred on their behalf by their families (Goldrick-Rab, 2016). Furthermore, it is important to note that the biggest driver in the increase of a college's cost of attendance is not tuition and fees, but the other items such as transportation, books, supplies, personal expenses, and living fees (Goldrick-Rab, 2016). It is for this reason that attempts to restrict tuition increases or reduce tuition costs to zero are unsuccessful in improving college affordability (Goldrick-Rab, 2016). When considering financial aid awards, "schools typically provide bigger living cost allowances for students living on campus compared to living off campus and allow much more for students living off campus apart from family compared to living with family" (Goldrick-Rab, 2016, p. 42). It is significantly more difficult for colleges to estimate the costs associated with students living off-campus, and many universities fail to thoroughly research the actual costs. There is also an assumption that students who choose to live at home do so for free. Research indicates that "even when parents pay the family's rent or mortgage, students often pay for significant amounts of food directly out of pocket—and families are sometimes in no position to put any money in those pockets" (Goldrick-Rab, 2016, p.44). Further research of low and moderate income students from Wisconsin

revealed that "55 percent of students were making financial contributions to family, with 17 percent providing at least \$200 per year" (Goldrick-Rab, 2016, p. 44).

The unpredictability of college costs has a direct effect on students, particularly those whom are reliant on financial aid. Students commit to a college with knowledge of the costs their first year, but with relative uncertainty of how those costs could change over the next 3-5 years. Coupled with the fact that the time it takes to earn a degree is increasing, students can find themselves in a precarious situation as it relates to the cost of college.

Another challenge that students face in addressing the cost of college is that upon determination of the family's expected family contribution, it has to be paid (Goldrick-Rab, 2016). In the event that a student's family is unwilling or unable to pay the contribution, it becomes the student's responsibility to come up with the money, which is usually done by taking out loans (Goldrick-Rab, 2016). For students who are classified as dependents for financial aid purposes, their parent and/or guardians financial resources are considered when determining the expected family contribution (Goldrick-Rab, 2016). However, many students do not have access to those financial resources, and with no legal obligation for parents to pay for college, "not all contribute as much money as colleges and Uncle Sam say they should, and some contribute no money at all" (Goldrick-Rab, 2016, p. 47). Students in this category often find themselves in a very tough position, and struggle to gain access to the financial resources needed to fund their education. Additional research indicates that a good portion of students who are expected to provide financially for college receive no help from their parents to do so (Goldrick-Rab, 2016).

The Role of Family Members

When obtaining information about college and postsecondary education, students primarily rely on their parents and immediate family members (McKillip, Rawls, & Berry, 2012). Furthermore, because of convincing research explaining the benefits of parental involvement (Henry, Cavanaugh, & Oetting, 2011; Holcomb-McCoy, 2010; King, 2012), it is plausible that high levels of parental involvement can have a positive effect on the college-going rate of low-income students and students of color, who are disproportionately first-generation students (Holcomb-McCoy, 2010). In conjunction with this, research indicates that parental support is one of the largest indicators of students' educational aspiration (Holcomb-McCoy, 2010). For rural students, parental support in the decision to attend college is crucial (King, 2012). However, parental support, expectations, and definitions of success are not consistent; varying based on socioeconomic status (Walpole, 2007). This, in turn, has an impact on student aspirations (Walpole, 2007).

It is important to note that despite income, parents feel a strong sense of responsibility for the college readiness of their child (Kiyama et al., 2015). In many situations, the conversations as it relates to low-income families and college access is deficit focused; in that it highlights what they lack, as opposed to what they have (Kiyama et al., 2015). This leads to the positioning of families solely as recipients of knowledge relating to the college admissions process, and ignores the possibility that they may have their own valuable knowledge to contribute to the process. In order for college access programs to experience optimal success, they must not only have parents

and families participate in the program, but positively position parents in ways that are traditionally unseen (Kiyama et al., 2015).

While parental investment in schools is paramount to student success, it is important to note that low-income families face challenges that make being involved difficult. In addition to issues beyond a family's control, such as language or cultural barriers and an unwelcoming school climate, low-income families may also face scheduling challenges due to working multiple jobs or working nontraditional hours, thus impacting their ability to be physically present in schools (Henry, Cavanaugh, & Oetting, 2011). Furthermore, when preparing students for college, parents of first-generation students may be limited in their capacity to support their children in the decision making process, beyond encouraging them to pursue a college degree (Bernhardt, 2013).

Family members not only play an important role in how students obtain information about college and postsecondary education, when students enroll in college, these relationships impact their college experience. Wang (2014, p. 272) found that "strong parent-student relationships are especially important", especially when considering the transformative effect it can have for first-generation students.

Particularly, Wang (2014) found that memorable messages, which are messages that hone in on important issues in a person's life and are both personal and legitimate, are stored in long-term memory and can be a significant source of encouragement for first-generation students as they transition to college.

When first-generation students matriculate to college, they disrupt the "pattern of intergenerational inheritance of educational level" (Gofen, 2009, p. 104). This must not be discounted, because it is typical for children whose parents have low levels of

education to continue the pattern of low educational attainment (Gofen, 2009).

Consequently, those first-generation college students who have broken through to a higher level of education success then experience a "culture shock" resulting from exposure to a lifestyle of which their parents could not have prepared them (Gofen, 2009).

Nevertheless, the ability of a family of limited means to create opportunities for a better future via higher education for children should be recognized and particular attention should be given to a family's nonmaterial resources: habits, priorities, belief systems, and values (Gofen, 2009, p. 106). Families are able to use these nonmaterial resources in a way that helps students acquire accomplishments that would normally be beyond the family's reach (Gofen, 2009, p. 106). Thus, families with limited financial means may be able to structure their time, and adjust their habits, priorities, and beliefs in a manner that helps children have greater opportunities.

It is extremely common to hear that low-income parents differ in the educational aspirations and expectations that they have for their children. However, the expectation of parents from all backgrounds is that their children will attend college (Gofen, 2009). The differentiating factor is a family's ability to make those expectations become a reality (Gofen, 2009). Families who are able to break the college barrier are in a unique position to counsel and assist others, providing guidance about "how to invest their nonmaterial resources such as discussions of future plans, explicitly expressing expectations, decision making that prioritizes schooling, and building motivations" (Gofen, 2009, p. 117).

The educational background of a family impacts the degree that families communicate information regarding college preparation. Research from Lawrence (2016)

indicates that, "access to a parent with personal knowledge of how to successfully plan for the college transition has been linked to advantageous information about what courses a student should take in secondary school, how to search for institutions, and what strategies to pursue in order to gain admission" (p. 74).

Families where college matriculation is the norm speak differently about what is necessary to prepare for college, and the conversations that families engage in around college have effects. If a student is in a family where both their parents and one or more of their grandparents attended college, it is more likely that their family engaged in conversations about college while the student was in high school, and that the family was better equipped to have those conversations (Lawrence, 2016). Lawrence (2016) found that "seeking information from parents about college entrance requirements has significant affects on the types of institutions to which students submit applications" (p. 73). The influence of parental information "pushes students who would be the first in their families to attend college and the children of parents who were the first in their families to do so to apply to a four-year college rather than a two-year college" (Lawrence, 2016, p.73). However, when looking at students who had a parent and a grandparent who attended college, Lawrence (2016) found increased likelihood that the student applied to a highly selective four-year institution as opposed to a less selective four-year institution.

When considering college enrollment for first-generation students, the influence and value of family can create tension and there is the possibility for home-school value conflict (Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015). This conflict is

rooted in Greenfield's theory of social change and human development which explores the conflict between collectivistic values and individualistic values.

The tension can be especially pronounced for Latino first-generation students, who are raised in a culture that is collectivistic and are taught to prioritize family obligations (Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015). When students go away to college, they face challenges, as the behavioral demands and values are more individualistic and differ from what they are accustomed to (Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015). While students may have previously been able to navigate the competing worlds of academics and family with relative ease, it becomes more difficult to do so in college; where the academic demands are greater than in high school, and students may face challenges in being as actively involved with their family due to distance (Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015). With the recognition that their parents sacrificed a great deal to provide them with their educational opportunities, Latino students find themselves "caught between two conflicting definitions of family obligation: aiding the family directly and aiding the family in a long-term sense by doing well in school" (Vasquez-Salgado, Greenfield, & Burgos-Cienfuegos, 2015, p. 273).

In addition to home-school value conflict, first-generation students may experience family achievement guilt, where they feel guilty for having greater postsecondary education options and success than others in their family (Covarrubias, Romero, & Trivelli, 2015). Family achievement guilt can lead to students feeling that they must downplay their academic achievements when they are around their family (Covarrubias, Romero, & Trivelli, 2015). The feelings of family achievement guilt are

likely amongst first-generation college students, as well as students of Mexican heritage because of the strong emphasis placed on family (Covarrubias, Romero, & Trivelli, 2015). Students may "feel that their individual academic achievements may disrupt the harmony of existing family relationships that are based on collective family needs and obligations" (Covarrubias, Romero, & Trivelli, 2015, p. 2032). Research indicates that these feelings of guilt can significantly affect the well-being of first-generation college students (Covarrubias, Romero, & Trivelli, 2015).

High School Counselors: The Gatekeepers and Sources of Capital

Research indicates that high school counselors can play a large role in increased college enrollment (McKillip et al., 2012). Students who reported more guidance in schools as it relates to assistance in completing college applications, financial aid paperwork, writing essays, or having time to visit colleges were more likely to enroll in a four-year institution as compared to enrolling in a two-year institution or not enrolling at all (McKillip et al., 2012). Additional research indicates that students who saw the counselor for information about college by the tenth grade were increasingly more apt to apply to college, and also had greater odds of applying to two or more schools, as opposed to none (Bryan, Moore-Thomas, Day-Vines, & Holcomb-McCoy, 2011).

The role of a guidance counselor is significant for students from low-income families, many of whom are first-generation students. As these students matriculate through school, their parents and family members are less able to assist them, increasing the necessity of school counselors to help them with academics and the college admissions process (Bryan et al., 2011). Accessibility of counselors in schools affects a student's ability to get assistance, as well as the roles and perspectives adopted by

counselors. Many counselors are unable to devote large amounts of time to college preparatory help for students because of the number of students within their caseload and limited time (McKillip et al., 2012).

The value of counselor involvement with students cannot be underestimated. For first-generation students, counselors can provide necessary social capital to help navigate the unknown territory. Social capital exists in the relations between people, such as relationships between family members, church parishioners, and those who live in the same community (McKillip et al., 2012). Coleman theorized that social capital could be present in the relationships that students have with their parents, and also in the relationships that parents have with other parents (McKillip et al., 2012). The existence of social capital can cause the creation of human capital, which Coleman has defined as knowledge or skills acquired through education (McKillip et al., 2012). Students' relationships with their counselor can make them privy to information related to college applications and admissions policies, or may connect them to others who can assist them in their application process, thus increasing the student's social capital (McKillip et al., 2012). The presence of social capital is beneficial not just as first-generation students go through the college application and admissions process, but also once they arrive on campus and seek to get acclimated. Furthermore, students who are unable to acquire social capital from home need to have consistent, in depth interactions with their counselors to truly benefit from the social capital provided by their counselors.

An extension of social capital is cultural capital. Cultural capital has often been viewed as identical to elitist culture such as classical music, fine art, and "good" literature (Grayson, 2011). There exists the idea that those who are exposed to this exclusive and

elitist culture are more likely to understand the educational system and are able to more effectively communicate with teachers in regards to the academic performance required to be successful in the education system (Grayson, 2011). Students with parents who have knowledge of the educational system are able to acquire more cultural capital necessary to deal with problems they may face in education (Grayson, 2011).

For many first-generation students, counselors are the gateway to accessing crucial information relative to postsecondary education. Unfortunately, many counselors also serve as gatekeepers by discouraging some students from attending college, while encouraging others in their pursuits (Holcomb-McCoy, 2010). Students can help combat this process through engaging in early and frequent conversations with their counselors about their postsecondary aspirations. Counselors must be willing and able to adequately serve each student, and provide him or her with the information needed to sufficiently pursue their postsecondary goals. Furthermore, it is imperative that counselors not assume that a student or family's lack of social capital equates to a lack of interest in attending college (Henry et al., 2011).

Understanding College Access Programs

College access programs have been viewed as necessary interventions to help close the educational attainment gap that exists between underserved students (generally low-income, first-generation, students of color) and others (Dyce, Albold, & Long, 2013). Utilizing the definition provided by Hagedorn and Tierney (2002), Dyce et al., (2013) defined college access programs as "enhanced programs that supplement a school's regular activities and are aimed at low-income youth who otherwise might not attend college" (p. 154). The creation of college access programs is also rooted in two

assumptions, one being that schools are not sufficiently preparing students for college, the other being that colleges and universities are becoming increasingly interested in recruiting and retaining students who have historically been excluded from higher education (Dyce et al., 2013). When compared to non-participants of college access programs, participants are more likely to be female, and also more likely to be Asian, Black, or Hispanic (Glennie et al., 2015). The majority of college access programs utilize a variety of strategies such as academic counseling, mentoring, and academic preparation (Bergerson, 2009). These programs may also provide scholarships or other funding incentives and support for students once they enter college (Bergerson, 2009).

Nationwide, these programs serve thousands of students; however, despite their presence, the stratification that exists within higher education has not been eliminated or reduced (Bergerson, 2009).

College access programs are valuable because they address structural and institutional barriers to access and equity within higher education. Participation in these programs helps to increase student knowledge about college, and in many programs, provides students with access to collegiate resources and environments (Dyce et al., 2013). Also, as Glennie, Dalton, and Knapp (2015) indicated, "students in these programs are more likely to apply to college and apply for financial aid than their peers who did not participate in such a program" (p. 965). Students who participate in a college access program that is located on a college campus further benefit as, "being on a campus regularly helps students belong, demystifies the college experience and students begin to learn how to navigate the world of higher education" (Mitchem & Becker, 2016, p. 7). Yet, despite increased college knowledge and access to resources, and higher

application rates compared to peers who did not participate in programs, it does not "necessarily translate into improvements in actual college attendance" (Glennie et al., 2015, p. 975). Furthermore, participation in a college access program does not guarantee success once a student is enrolled in college. These programs provide a variety of services and support that may not extend to college, causing students to struggle to identify where or how to seek assistance (Glennie et al., 2015).

There are a variety of reasons that institutions have an interest in having or hosting college access programs on campus. These programs increase the pipeline of students from diverse backgrounds for the college, and colleges are able to ensure the college readiness of these students, which increases the chances that they are academically prepared for the rigors of college and are able to complete a degree (Mitchem & Becker, 2016). When students attending a college access program have a positive experience, it also helps their high school build a positive relationship with the college, thereby increasing the college's visibility and accessibility with students in that high school (Mitchem & Becker, 2016). Additionally, colleges are able to use information regarding the students' experiences with the college access program to gain a better understanding of services and strategies needed to serve students in a way that leads to enrollment and earning a degree (Mitchem & Becker, 2016).

Federal Programs Aimed at Increasing College Enrollment

The passage of the federal higher education act in the United States led to the creation of the first federally supported education programs whose goal was to increase the college enrollment and completion rates of low income and underrepresented ethnic minority students (Pitre & Pitre, 2009). The first three programs, most commonly known

as TRIO programs, were the Educational Talent Search, Upward Bound, and Student Support Services (Pitre & Pitre, 2009). The primary goal of these programs is to "provide equal educational opportunities for all U.S. citizens by increasing college readiness and developing higher education aspirations among students from low-income, first-generation college, and ethnic/racial minority backgrounds" (Pitre & Pitre, 2009, p. 96-97).

A challenge that educational opportunity programs such as the TRIO programs face is the perception that they are engaging in reverse discrimination by excluding students from higher income groups or dominant ethnic/racial groups from the services provided for students who are low-income or underrepresented racial/ethnic minorities. These challenges fail to acknowledge that without these programs, the diversity of students pursuing and enrolling in higher education programs in the United States would be extremely low (Pitre & Pitre, 2009). Across the United States, nearly 866,000 lowincome students between the ages of 11 and 27 are served in over 2700 TRIO Programs, the majority of which serve students in grades 6-12 (Pitre & Pitre, 2009). While a significant number of the students who receive TRIO services are underrepresented racial/ethnic minorities, 37% of all TRIO students are White (Pitre & Pitre, 2009). According to a 2007 report from the Council for Opportunity in Education, 25,000 veterans and 22,000 students with disabilities are served through TRIO Programs. While Upward Bound and Educational Talent Search programs focus on students who are underrepresented ethnic/racial minorities and assist them in transitioning from high school to college, Student Support Services is focused on these students' retention once they are enrolled in college (Pitre & Pitre, 2009).

Upward Bound is the largest U.S. federal government program focused on helping students acquire postsecondary education. Students who are low-income whose parents have not earned a bachelor's degree are eligible to participate in this program, which is most commonly located on college or university campuses (Pitre & Pitre, 2009). The program aims to "prepare low-income, first-generation college, and underrepresented secondary students for academic success beyond high school" with a goal of increasing the rates at which these students enroll in and graduate from institutions of higher education (Pitre & Pitre, 2009, p. 100). Upward Bound provides low-income first-generation students with supplemental instruction on a college campus via their summer programming (Bergerson, 2009). Students who participate in this program also receive services to assist them in the college application process, as well as assistance in successfully completing their high school graduation requirements (Pitre & Pitre, 2009).

Educational Talent Search programs begin to serve students as early as the sixth grade. These programs focus on underrepresented ethnic minority, low-income, and first-generation college students who have demonstrated academic promise, but may be unnoticed in the process of preparing and planning for college (Pitre & Pitre, 2009). Serving over 1000 students a year, program staff and counselors develop activities to cultivate skills and knowledge necessary for college and travel to schools to work with students and teachers to create the best learning environment for student success. Students are also given information on career paths, college choices, and are provided with character education workshops along with receiving help in navigating the college admission and financial aid process (Pitre & Pitre, 2009).

Another federal program focused on preparing low-income students for secondary education is the Gaining Early Awareness and Readiness for Undergraduate Program or GEAR UP. Established in 1998 under the Higher Education Amendments of 1998, GEAR UP is designed to "increase the number of low-income students who are prepared to enter and succeed in postsecondary education" (Bausmith & France, 2012, p. 235). GEAR UP seeks to accomplish this through the provision of grants to states and district partnerships that then provide services at high-poverty middle- and high schools. Unlike other federal programs, GEAR UP functions as a cohort-based model, meaning that it provides funds for an entire cohort of students beginning in seventh grade (Bausmith & France, 2012). GEAR UP also has a focus to involve both students and families; and, "includes visits to campus, summer campus, information sessions with higher education representatives, career planning, and academic preparation" (Bergerson, 2009, p. 90).

Advancement via Individual Determination

The Advancement Via Individual Determination (AVID) program is a nationally recognized in-school support program that encourages college readiness in populations that are historically underrepresented in higher education (Bernhardt, 2013). The AVID program seeks to create "a community of stakeholders genuinely committed to increasing the number of students who enroll and persist in four-year colleges" (Bernhardt, 2013, p. 205). While AVID is a school-based program, it heavily relies on engagement from families and school personnel (Bernhardt, 2013). Nevertheless, most students who participate in AVID programming do not have access to "the kinds of information, knowledge, understandings, and experiences necessary to prepare for and successfully gain admission into a postsecondary institution" (Bernhardt, 2013, p. 210). To counteract

this, "successful AVID programs reach out to parents and guardians to provide them with cultural capital that will empower them to support their child's academic endeavors and create a college-going culture in their home, in addition to delivering basic information on college readiness and preparation" (Bernhardt, 2013, p. 211).

There are several valuable components of the AVID program that help provide students with the tools needed to gain acceptance and be successful at postsecondary institutions. The curriculum provides students with exposure to "the types of experiences, knowledge, and language useful for navigating complex school bureaucracies" (Bernhardt, 2013, p. 213). Additionally, the AVID curriculum teaches important terminology and success strategies for students. Students are taught to understand things such as FAFSA, SAT, ACT, grade point average, and drop/add; as well as methods for class organzation, tracking assignments and grades, and note taking (Bernhardt, 2013).

Furthermore, through AVID programming, students receive lessons in self-advocacy, are encouraged to take ownership over their educational experience, and gain exposure to different strategies to assist them in collaboration and communication with all levels of school personnel (Bernhardt, 2013). For students, "developing a more informed understanding about how schools operate provides advantage, status, and access to numerous resources that are important for school success and college attainment" (Bernhardt, 2013, p. 214)

College Going Culture: The Work of Schools

While college access programs have proven to be beneficial to some students in providing college awareness and college knowledge, they are not always readily accessible. Despite having a significant population of low-income, first-generation

students, it is possible that a school may not have access to aforementioned programs such as Upward Bound or AVID. For this reason, it is imperative that schools create and maintain a college going culture.

In a college going culture, there is the expectation of postsecondary education for all students (CollegeBoard, 2006). This happens when, according to the Pathways to College Network, schools actively do the following: "expect that all underserved students are capable of being prepared to enroll and succeed in college, provide a range of high-quality, college-preparatory tools for students and families, embrace social, cultural, and varied learning styles when developing the environment and activities at the school, involve leaders at all levels in establishing policies, programs, and practices, maintain sufficient financial and human resources for this mission, and assess policy, programs, and practices regularly to determine their effectiveness" (CollegeBoard, 2006). In schools that prioritize a college-going culture, "students appreciate academics, have a desire to succeed and a drive to attend college, and become lifelong learners" (CollegeBoard, 2006, p. 2).

When schools engage and prioritize creating a college going culture, it helps students, especially those who may be low achievers, from middle to low-income levels, underrepresented minorities, disabled youth, and families where no one has attended college before overcome common barriers to college enrollment, including comunciation barriers, lack of information and support, low expectations of attainment, lack of access to technology, and misinformation regarding the availability financial aid (CollegeBoard, 2006).

The "Undermatching" Phenomenon

High schools engage in college preparation work on two distinct levels. They have the responsibility of preparing students to be successful in college, and they also must provide information that will help students transfer their preparation to enrollment at a college or university that will help them take full advantage of their talents (Bowen, Chingos, & McPherson, 2009). This research from the Chicago Consortium's reports "Potholes on the Road to College" and "Making Hard Work Pay Off" introduced the framework of "match" to explain if a student enrolled in a college that had a selectivity level that matched the colleges where the student was likely to have been accepted, given their qualifications (Bowen et al., 2009). Students "mismatch" or "undermatch" when they choose to enroll in a college or university that has a selectivity level below their qualifications. Students who are qualified to attend a four-year college or university that is nonselective "mismatch" or "undermatch" when they choose to enroll in a two-year college (Smith, Pender, Howell, & Hurwitz, 2012). The Chicago studies found that many cases of undermatching were the result of lack of information and lack of college planning (Bowen et al., 2009). Understanding the circumstances surrounding undermatching is important because, "students are more likely to complete college degrees and fare well in the labor market when they attend a college that matches their level of academic preparation" (Radford & Howell, 2014, p. 133).

When examining enrollments among the 1999 cohort of North Carolina high school seniors who applied to North Carolina State University and the University of North Carolina at Chapel Hill based on SAT scores and high school GPA, Bowen et al. (2009) found that of these students, 40 percent undermatched (p. 102). A closer

examination of this data indicated that undermatching was most common with black students (particularly black women), partially because these students undermatched to historically black colleges and universities (HBCUs) (Bowen et al., 2009). Factors correlated to undermatching include family income and parental education—within this cohort of students, those from more affluent families with a higher level of education were significantly more likely to attend one of the most selective universities (Bowen et al., 2009).

Undermatching can occur at different points within the application process. If students fail to apply to schools that match their academic selectivity level, they will undermatch (Smith et al., 2012). If students do apply to schools that match their academic selectivity level, but are not accepted, they will undermatch (Smith et al., 2012). Finally, students may be accepted to a school that is a match, but choose not to enroll (Smith et al., 2012). While students can undermatch at different phases within the process, the research further indicates that the majority of students undermatch at the application point of the process (Bowen et al., 2009; Smith et al., 2012)

In order to prevent undermatching, it is important that students have access to sufficient information about schools within their academic range. In Radford's research of public high school valedictorians from five states who graduated between 2003-2006, these students indicated that information about colleges was commonly provided to them in large groups with great attention given to public in-state colleges where the average student from their school would be most likely to enroll (Radford & Howell, 2014). When the valedictorians did specifically ask about more selective, private, or out-of-state institutions, they found their counselors to be uninformed about the admissions process

for these schools (Radford & Howell, 2014). The lack of sufficient information for students presents a huge challenge because without it, "students are forced to rely on themselves, their families, and their social networks" (Radford & Howell, 2014, p. 140). Many low-income, first-generation students do not have an ample social network that would be able to provide them with the resources necessary to make an informed decision about attending a more selective college. When students acknowledged receiving information about college, they were "over 50 and 75 percent more likely to apply and be admitted to an institution that matched their academic credentials, respectively" (Fosnacht, 2014, p. 6).

The consequences of undermatching do not only affect the students who undermatch, but also have societal implications. People who have higher levels of education enjoy "higher wages, lower unemployment rates, better health insurance and pensions, greater satisfaction with their jobs, and healthier lifestyles" (Radford & Howell, 2014, p. 138). Furthermore, those who attend relatively selective institutions are not only more apt to earn a bachelor's degree, but also experience greater success in obtaining employment (Radford & Howell, 2014).

Research Questions

This research was guided by the following research questions:

- 1. What was the impact on college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member?
- 2. How have the gains from students affected by the presence of the Carolina College Advising Corps in this rural county been sustained?

Chapter 3: Methodology

Aim of the Study

In recent years there has been an increased focus on ensuring that all students have access to postsecondary education. Research has indicated that having access to postsecondary education is challenging, particularly for students from underrepresented backgrounds. There are currently a variety of programs and initiatives in existence to address the challenges that students from underrepresented backgrounds face as they pursue postsecondary education. The aim of this study was to determine the effectiveness of an intervention initiative designed to increase college application and acceptance rates. Specifically, this study assessed the impact of the Carolina College Advising Corps on rural, first-generation, low income, minority students. The setting was a rural county in northeast North Carolina at schools that have been serviced by the Carolina College Advising Corps.

Research Methodology

For this study, quantitative research methodology using a survey research design was utilized. In survey research design, the researcher provides "a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population" (Creswell, 2008, p. 388). In using survey research design, the researcher collects "quantitative, numbered data using questionnaires, or interviews" (Creswell, 2008, p. 388). Once this data is collected, the researcher analyzes the data to identify trends and to test research questions (Creswell, 2008). Survey research design is also helpful to "determine individual opinions" (Creswell, 2008, p. 388). More specifically, the researcher will engage in a cross-sectional survey design,

which is used to "collect data about current attitudes, opinions or beliefs" (Creswell, 2008, p. 389).

The cross-sectional survey research design was an appropriate strategy for this study. It enabled the researcher to receive helpful information regarding the implementation of the programmatic aspects of the Carolina College Advising Corps and to receive clarity regarding its ability to meet the needs of low-income, rural, first-generation underrepresented students.

Participants

The participants were those who are currently affiliated with the Carolina College Advising Corps. This participant group represented students who received services from the Carolina College Advising Corps during the 2018-19 school year. Participants were surveyed about their experience with the Carolina College Advising Corps through a combination of closed and open-ended questions.

From the available pool of potential students, the researcher used convenience sampling to identify a select sample of 50 participants. Of that 50, 26 responded, but only 20 met the criteria. Therefore, the number of participants in the study was 20. The school district agreed to provide access to current students to conduct this research, and assisted in posting a link to the online survey in a student web portal. The participants were students who currently attend a high school in the rural county serviced by the Carolina College Advising Corps. Participants were male and female, African American, Hispanic/Latino, or Native American over the age of 18. The online survey allowed students to select demographics, and those who did not meet the criteria (over the age of 18, African American, Hispanic/Latino, or Native American)

were routed to the end of the survey.

Data Collection Instrument

The researcher asked and received permission to modify the Milwaukee Public Schools Senior Exit Survey (see Appendix) to collect the data for this study. This survey was developed to provide a rich source of information on students' future goals, aspirations and perceptions of their experience as it relates to their specific college and career readiness. Reliability and validity for the Senior Exit Survey was established by the Research and Evaluation department of Milwaukee Public Schools. Reliability and validity for the revised instrument for this study was established by a group of 2-3 experts, using the iterative process. The instrument was approved by the dissertation committee prior to IRB submission.

Procedures

The researcher utilized a gatekeeper at the school district to provide access to current students to conduct this research. The gatekeeper posted a link to the online survey in a student web portal. The gatekeeper, who works within the school district, assisted the researcher in gaining access to participants within the geographical area of which the researcher is interested. Once the link was posted within the student web portal, potential participants had access to the survey.

Data Analysis

Once the researcher received responses from the desired number of participants, the data analysis began. All numerical data was entered into a database using Statistical Package for Social Sciences (SPSS) version 24. SPSS first launched in 1968, and is a software used to edit and analyze data (Geert van den Berg, 2017). The analysis included

statistical data. The researcher used descriptive statistical analysis from the survey responses for frequencies, percentages, demographic data, and closed and open-ended responses.

Ethical Considerations

The researcher is committed to maintaining the ethics of this study. Participants received a unique link to the survey and their responses will remain confidential, as the researcher is the only person to have access to the data set.

Trustworthiness

To ensure validity and reliability, the researcher used committees of experts, who work within the field of school counseling and college access to approve the survey instrument. With the assistance of the gatekeeper, the researcher employed member checking and triangulation to ensure the accounts provided were accurate and could be trusted.

Potential Research Bias

The researcher has worked professionally within the field of college admissions, financial aid, and college access; providing a level of understanding and knowledge of best practices that could lead to bias. Furthermore, the researcher was a resident of this area for almost three years, and worked in a school in a neighboring county; making the researcher keenly aware of the educational challenges in the county. Finally, the researcher has college classmates who were a part of the inaugural Carolina College Advising Corps cohort.

Chapter 4: Results

Aim of the Study

This study was designed to assess the impact of an intervention program on college application and acceptance rates for student participants in the Carolina Collage Advising Corp in a rural county in northeast North Carolina. The students were first-generation, low-income, minority students. The results of the study are presented below.

Results

Research question 1. What was the impact on college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member? Statements in survey questions 4, 5, 6, 7, 8 were used to answer this question.

Survey question 4. This question asked students to indicate their level of agreement with seven statements, selecting from four response choices 4 (strongly agree), 3 (agree), 2 (disagree), and 1 (strongly disagree). The first statement was, "An adult at my school has helped me plan for life after high school." Data indicated that 60% (n = 12) of participants strongly agreed with this statement, whereas 30% (n = 6) agreed, 5% (n = 1) disagreed, and 5% (n = 1) strongly disagreed. The next statement was, "I could ask at least one school staff member (teacher, counselor, etc.) to write me a recommendation for a job, program, or college." The data reflected that 70% (n = 14) of participants strongly agreed with this statement and 30% (n = 6) agreed. The third statement was, "Teachers at my school expect most students to go to college." In this case, 60% (n = 12) strongly agreed and 30% (n = 6) agreed. However, 10% (n = 2) of participants strongly disagreed with this statement. Statement four was, "Teachers at my

school help students plan for college." Data reflected that 40% (n = 8) strongly agreed and 25% (n = 5) agreed, while 25% (n = 5) disagreed and 10% (n = 2) of participants strongly disagreed. The next statement was, "The curriculum at my school is designed to help me prepare for college." In this case, 35% (n = 7) of participants strongly agreed and 25% (n = 5) agreed, whereas 25% (n = 5) of participants disagreed and 15% (n = 3) strongly disagreed. Statement six was, "Most of the students in my school are planning to go to college." In response, 40% (n = 8) agreed and 30% of participants (n = 6) strongly agreed. However, 15% (n = 3) of participants disagreed and 15% (n = 3) of participants strongly disagreed with this statement. The final statement for question four was, "Teachers at my school feel it is part of their job to prepare students to succeed in college." Data reflected that 30% (n = 6) of participants strongly agreed and 45% (n = 9) of participants agreed, while 10% (n = 2) disagreed and 15% (n = 3) of participants strongly disagreed.

Survey Question 5. This question asked students to indicate how often during the school year that they engaged in seven different college planning behaviors, selecting from four response choices 4 (5 or more times), 3 (3-4 times), 2 (1-2 times), and 1 (never). The first statement was, "Met with your college adviser." In response, 65% (n = 13) of participants selected 5 or more times, 25% (n = 5) of participants selected 3-4 times, and 10% (n = 2) of participants said 1-2 times. The second statement was, "Talked to a college adviser at school in depth about planning for college." The data reflected that 35% (n = 7) of participants selected 5 or more times, 30% (n = 6) of participants selected 3-4 times, 25% (n = 5) of participants selected 1-2 times, and 10% (n = 2) of participants selected never. The next statement was, "Attended a college fair or met with a college

representative." In this case, 60% (n = 12) of participants selected 1-2 times, 20% (n = 4) of participants selected 3-4 times, and 20% (n = 4) of participants selected 5 or more times. Statement four was, "Visited a college or university." The data indicated that 25% (n = 5) of participants selected 5 or more times, 10% (n = 2) of participants selected 3-4 times, 55% (n = 11) of participants selected 1-2 times, and 10% (n = 2) of participants selected never. The fifth statement was, "Visited a college or university that you submitted an application to." In response, 35% (n = 7) of participants selected never, 30%(n = 6) of participants selected 1-2 times, 15% (n = 3) of participants selected 3-4 times, and 20% (n = 4) of participants selected 5 or more times. The sixth statement was, "Reviewed college materials at your school." The data reflected that 20% (n = 4) of participants selected 5 or more times, 30% (n = 6) of participants selected 3-4 times, 40%(n = 8) of participants selected 1-2 times, and 10% (n = 2) of participants selected never. The last statement was, "Talked with your parents about future plans." In this case, 55% (n = 11) of participants selected 5 or more times, 35% (n = 7) of participants selected 3-4 times, and 10% (n = 2) of participants selected 1-2 times.

Survey Question 6. Thus question asked students to indicate how often during high school that they engaged in ten different postsecondary planning behaviors with their college adviser, selecting from four response choices 4 (a lot), 3 (some), 2 (a little), and 1 (not at all). The first statement was, "helped me select courses I need for work or admission to college." In response, 45% (n = 9) of participants said a lot, 15% (n = 3) of participants said some, 20% (n = 4) of participants said a little, and 20% (n = 4) of participants said not at all. The second statement was, "helped me decide what I want to do after I graduate." The data indicated that 40% (n = 8) of participants selected a lot,

30% (n = 6) of participants selected some, 20% (n = 4) of participants selected a little, and 10% (n = 2) of participants selected not at all. The third statement was, "encouraged me to continue my education after high school." The data reflected that 75% (n = 15) of participants selected a lot, 20% (n = 4) of participants selected some, and 5% (n = 1) of participants selected a little. The next statement was, "encouraged me to apply to several different schools." In response, 75% (n = 15) of participants selected a lot, 20% (n = 4) of participants selected some, and 5% (n = 1) of participants selected a little. The fifth statement was, "talked to me about what college would be like." The data indicated that 55% (n = 11) of participants said a lot, 20% (n = 4) of participants said some, 15% (n = 3) of participants said a little, and 10% (n = 2) of participants said not at all. The sixth statement was, "talked to me about colleges/schools suited to my interests and abilities." In this case, 50% (n = 10) of participants selected a lot, 30% (n = 6) of participants selected some, 10% (n = 2) of participants selected a little, and 10% (n = 2) of participants selected not at all. The seventh statement was, "encouraged/helped me to complete financial aid forms such as FAFSA (Free Application for Federal Student Aid)." In response to this statement, 75% (n = 15) of participants selected a lot, 20% (n = 15) of participants se 4) of participants selected some, and 5% (n = 1) of participants selected a little. The eighth statement was, "helped me find possible scholarships to apply for." In this case, 40% (n = 8) of participants selected a lot, 35% (n = 7) of participants selected some, 15%(n = 3) of participants selected a little, and 10% (n = 2) of participants selected not at all. The next statement was, "helped me decide which schools to apply to." The data indicated that 40% (n = 8) of participants selected a lot, 40% (n = 8) selected some, 10%(n = 2) of participants selected a little, and 10% (n = 2) of participants selected not at all.

The tenth statement was, "helped me write essays or personal statements for college applications." The data reflected that 35% (n = 7) of participants selected a lot, 30% (n = 6) of participants selected some, 15% (n = 3) of participants selected a little, and 20% (n = 4) of participants selected not at all.

Survey Question 7. This question asked students to indicate the depth to which they discussed seven different topics related to college admissions and enrollment with their college adviser, selecting from three different response choices 3 (discussed indepth), 2 (discussed briefly), and 1 (did not discuss). The first statement was, "Different admissions requirements (four-year colleges vs. two-year colleges, etc.)." The data indicated that 40% (n = 8) of participants selected discussed in-depth, 45% (n = 9) of participants selected discussed briefly, and 15% (n = 3) of participants selected did not discuss. The second statement was, "How to decide which college to attend." In response, 60% (n = 12) of participants selected discussed in-depth, 25% (n = 5) of participants selected discussed briefly, and 15% (n = 3) participants selected did not discuss. The third statement was, "How to pay for college." In this case, 50% (n = 10) of participants selected discussed in-depth and 50% (n = 10) of participants selected discussed briefly. The fourth statement was, "Your readiness for college-level coursework." In response to this, 35% (n = 7) of participants selected discussed in-depth, 40% (n = 8) of participants selected discussed briefly, and 25% (n = 5) of participants selected did not discuss. The fifth statement was, "Opportunities to attend out of state colleges." The data reflected that 35% (n = 7) of participants selected discussed in-depth, 50% (n = 10) of participants selected discussed briefly, and 15% (n = 3) of participants selected did not discuss. The sixth statement was, "Your likelihood of being accepted at different types of schools."

The data indicated that 50% (n = 10) of participants selected discussed in-depth, while 40% (n = 8) of participants selected discussed briefly, and 10% (n = 2) of participants selected did not discuss. The seventh statement was, "What grades and test scores (ACT, SAT, etc.) you need to get into different types of schools." In this case, 80% (n = 16) of participants selected discussed in-depth and 20% (n = 4) of participants selected discussed briefly.

Survey Question 8. This question asked students to indicate how helpful the Carolina College Advising Corps programs was in helping them make plans for their life after high school, selecting from four response choices 4 (very helpful), 3 (helpful), 2 (somewhat helpful), and 1 (not helpful). In response, 50% (n = 10) of participants selected very helpful, 25% (n = 5) of participants selected helpful, and 25% (n = 5) of participants selected somewhat helpful.

Research question 2. This question asked How have the gains from students affected by the presence of the Carolina College Advising Corps in this rural county been sustained? Statements in question 9 were used to answer this question.

Survey Question 9. This question asked students to indicate their plans in the fall immediately following high school graduation, selecting from six response choices, 6 (other), 5 (joining the military), 4 (working), 3 (continuing my education in an apprenticeship), 2 (continuing my education at a 2-year community college or a technical/vocational school), 1 (continuing my education at a 4-year college). In response to this question, 5% (n = 1) of participants selected working, 15% (n = 3) of participants selected continuing my education at a 2-year community college or a technical/vocational

school, and 80% (n = 16) of participants selected continuing my education at a 4-year college.

Chapter 5: Discussion

Overview of the Study

This study focused on the effectiveness of a rural high school counseling intervention program designed to increase college application and acceptance rates. The researcher's primary objective was to understand key intervention strategies that support the target population in gaining access to higher education. Quantitative research methodology with a survey research design was used to address the research questions. The study was administered to students in two rural high schools serviced by the intervention program, collecting quantitative data through a survey instrument titled Student Survey of the Carolina College Advising Corps (see Appendix). This study included two research questions to determine the effectiveness of the intervention program at increasing college application and acceptance rates for rural, first generation students.

The researcher viewed college and postsecondary counseling and advising, along with the role of the Carolina College Advising Corps as essential in helping students to understand and access postsecondary options. The target population of the study included male and female students over the age of 18 who were African American, Hispanic/Latino, or Native American and who currently attend a high school in the rural county serviced by the Carolina College Advising Corps. Through a convenience sampling approach, the sample obtained 20 participants.

Research from the literature review revealed information regarding the challenges that rural, first-generation, low income, minority students encounter in gaining access to higher education. The United States Census Bureau projects that due to a shifting in

population demographics, beginning in 2045, non-Hispanic Whites will no longer be the majority of the United States Population (Vespa, Armstrong, Medina, & U.S. Census Bureau, 2018). Therefore, it is important to consider minority students' ability to access higher education and what schools and programs can do to provide further access exposure. Given the findings, it was predicted that the presence of the Carolina College Advising Corps positively impacted college enrollment at the research sites.

Results

Research question 1 was, What was the impact on college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member? Participant responses to many statements asked in questions 4, 5, 6, 7, 8 address this research question. From survey question 4, a majority of respondents (90%) indicated that an adult in their school helped them plan for life after high school. Furthermore, a majority of participants (70%) reported that most students in their school are planning to go to college and a majority of participants (75%) stated that teachers feel that it is a part of their job to prepare students to succeed in college.

In survey question 5, a majority of respondents (90%) indicated that they met with their college adviser three or more times during the school year, with 65% selecting five or more times. Also, the majority of participants (65%) reported that during the school year they talked with their college adviser in depth about planning for college. All respondents (100%) reported having attended a college fair or having met with a college representative at least once during the school year.

In survey question 6, which asked students to indicate the frequency at which they engaged in ten postsecondary planning behaviors with their college adviser, a majority of respondents (95%) indicated that their college adviser encouraged them to continue their education after high school, a majority of respondents (95%) reported that their college adviser encouraged them to apply to several different schools, and a majority of respondents (95%) indicated that their college adviser encouraged/helped them to complete financial aid forms such as FAFSA (Free Application for Federal Student Aid).

For survey question 7, which asked students to indicate the depth to which they discussed seven different topics related to college admissions and enrollment with their college adviser, a majority of respondents (90%) reported that they discussed their likelihood of being accepted at different types of schools with their college adviser. All respondents (100%) indicated that their college adviser discussed with them the grades and test scores needed to get into different types of schools, and all respondents (100%) reported discussing how to pay for college with their college adviser. Finally, a majority of respondents (85%) indicated that they discussed how to decide which college to attend with their college adviser.

Survey question 8 asked students to specify the degree to which the Carolina College Advising Corps program was helpful in making their plans for life after high school. All respondents (100%) indicated that the program was at least somewhat helpful, with 75% of respondents indicating that the program was helpful (25%) or very helpful (50%). Based on the survey results, the impact of college enrollment of rural, first-generation, low-income, minority students who attended schools that were serviced by a Carolina College Advising Corps member is increased due to student engagement in

postsecondary planning activities related to college enrollment with their college adviser, which indicates that students are planning to enroll in college.

Research question 2 was, How have the gains from students affected by the presence of the Carolina College Advising Corps in this rural county been sustained? Participant responses in question 9 were used to answer this question. Question 9 asks students to indicate their plans in the fall immediately following high school graduation. The majority of respondents (95%) stated that they planned to continue their education in college, 80% planning to continue at a four-year college and 15% planning to continue at a 2-year community college or technical vocational/school. Based on survey results, the gains from students affected by the presence of the Carolina College Advising Corps in this rural county have been sustained by increased planning to enroll in college immediately following high school graduation.

Survey question 10 asked participants to share the highest level of education attained by their mother/female guardian, choosing from 6 statements. In response, 20% (n=4) of participants indicated that their mother/female guardian graduated from a 4-year college, 15% (n=3) of participants responded that their mother/female guardian graduated from a 2-year college or technical/vocational school, and 5% (n=1) of participants indicated that their mother/female guardian went to college but did not graduate. Furthermore, 45% (n=9) of participants selected "graduated from high school" as the highest level of education attained by their mother/female guardian and 15% (n=3) indicated that their mother/female guardian did not graduate from high school. Survey question 11 asked participants to share the highest level of education attained by their father/male guardian, selecting from 6 statements. In response, 20% of

participants (n = 4) indicated that their father/male guardian went to college, but did not graduate, 40% (n = 8) of participants indicated that their father/male guardian graduated from high school, and 15% (n = 3) of participants responded that their father/male guardian did not graduate from high school. There was not a response to this question from 25% (n = 5) of participants. In survey question 12, participants were asked to share any comments that they had regarding the Carolina College Advising Corps. In response, 30% (n = 6) of participants shared comments, saying, "It is a great program and really beneficial for students to have.", "it is helpful", "My college advisor was very helpful in the college application process and i appreciate her very much.", "I have considered my college advisor very helpful with getting me to college.", and "i like turtles".

Implication of Findings

The researcher noted three major implications of the findings in this study. First, when provided with direct counseling and support, rural students can aspire to and plan to attend college at the same or higher rates as their non-rural peers. It is incumbent upon rural schools and districts to prioritize counseling tasks and responsibilities to ensure that school counselors and counseling support staff are able to spend a significant amount of their time providing students with high level support related to the college admissions and enrollment process if they desire for their college matriculation and enrollment rates to increase.

The second implication of the findings in this study is that the presence of a college adviser (or other dedicated staff member) to provide direct support and advising to students related to college admissions and enrollment decreases the likelihood that a school counselor is a gatekeeper to college access for students. With school counselors

having increased caseload sizes and greater administrative responsibility, they have limited time to work directly with students and which may (intentionally or unintentionally) result in counseling that is not attuned to students' needs, desires, or unique circumstances.

Finally, the third implication of the findings in this study is that the presence of a college adviser is a representation of a school's college-going culture and commitment to ensuring that students are equipped to overcome common barriers that prevent college enrollment. Priorities are commonly assessed through budget allocations, and dedicating a portion of budget towards the staffing of a college adviser (with differing responsibilities than a school counselor) would be proof that the pursuit of postsecondary education and opportunities are valued and supported.

Limitations

The researcher acknowledges four limitations to this study. The first limitation was the population size of the study. A convenience sampling approach was used in this study due to limited and restricted access to the research sites. The sampling approach coupled with the demographic restrictions (participants needed to be over 18 and identify as a part of an underrepresented minority group) resulted in a small sample size.

The second limitation was that the college advisers at the site who are a part of the Carolina College Advising Corps were unable to be surveyed. Receiving additional insight and perspective from college advisers regarding their training, key performance indicators, and annual goals, would have been helpful in assessing and evaluating their impact on site.

The third limitation was that while all of the participants are self-identified underrepresented minorities (Black/African-American, Native American, Hispanic/Latino, Asian), there was not an opportunity for them to specifically identify their racial/ethnic group. As a result, there is not data with the breakdown of the participants' racial/ethnic group.

The fourth limitation is that this study examines a portion of the National College Advising Corps operating in a rural area of one state. Therefore, the study may not provide comprehensive results. However, the results should be applicable to other rural areas serviced by National College Advising Corps.

Recommendations

This study focused on the effectiveness of the Carolina College Advising Corps, a counseling intervention program, in increasing college application and acceptance rates within a rural setting. The degree to which students have access to guidance regarding the college application and enrollment process affects their college fit (CITE). Based on the data collected and the literature review, the researcher recommends the following: (a) targeted goal-setting for high schools regarding postsecondary initiatives; (b) dedicated staff members responsible for college and postsecondary counseling; (c) implementation of summer transition support to fully assist students in their transition; (d) goal-setting and accountability regarding student postsecondary plans and outcomes; and (e) continued assessment of students' experiences regarding postsecondary planning.

Targeted goal-setting for high schools regarding postsecondary initiatives.

The researcher recommends that high schools annually engage in a process to set goals regarding their postsecondary initiatives. The researcher proposes that schools should

examine each cohort of students and set tiered goals regarding the postsecondary planning behavior that they desire for students to demonstrate. The goals could include, but are not limited to: percentage of seniors who complete the Free Application for Federal Student Aid (FAFSA), percentage of seniors who attend a college fair, percentage of seniors who complete postsecondary testing requirements (SAT, ACT, ASVAB). These goals can be set in conjunction with school and district priorities, and schools should look to meet these goals in a way that does not further strain staffing responsibilities or school budget. For example, many local community colleges and credit unions offer programs to help high school students complete the FAFSA. Encouraging students to attend those programs, or inviting representatives to come to the school to support students in these efforts can help students reach the goal without significantly increasing the responsibilities of school staff. Other options could be conducting a school day administration of the SAT or ACT so that students more readily have access to these postsecondary exams, increasing the likelihood that they complete the test; or partnering with other schools for larger programs such as a college fair to increase student participation and college interest.

Dedicated staff members responsible for college and postsecondary counseling. The researcher recommends schools hire and/or designate staff members whose primary responsibilities encompass assisting students in making and actualizing their postsecondary plans. Research from the National Association for College Admission Counseling (NACAC) report on high school counseling offices reveals that over 50% of counselors say that their department spends less than 20% of their time on college applications, selection, and readiness (Radford, Ifill, & Lew, 2016). Another

NACAC report highlights the value of having a counselor dedicated to college and postsecondary counseling, stating, "Counseling departments that have at least one counselor whose primary responsibility is college selection and/or admissions may be better able than counseling departments without such a specialist to assist students in their transition to college" (Velez, 2017, p.10). These staff members should be knowledgeable regarding the state, regional, and federal landscape as it relates to college access and admissions and be able to build positive, trusting relationships with students and families. Depending on school and cohort size, schools should ensure that caseloads of staff members responsible for college and postsecondary counseling are no more than levels as indicated by the American School Counselors Association (ASCA), but may find it advantageous to make caseloads smaller. Research also indicates that there is benefit in pursuing a near-peer model, which is what the College Advising Corps employs. Students may find it easier to relate to someone who is closer to their age and has a more recent postsecondary experience. Schools and districts may find it more affordable to hire recent college graduates as opposed to professionals with more experience. Regardless of which staffing model schools and districts decide to employ, the researcher firmly believes that it is of great benefit to students to receive college and postsecondary counseling to help them navigate and evaluate their options.

Implementation of summer transition support to fully assist students in their transition. Following high school graduation, students still need a great deal of support to ensure that their postsecondary plans are actualized. First-generation students are frequently uninformed regarding the many tasks that they must complete after graduation to be able to start classes in the fall. Failure to complete these tasks can place their

enrollment status in jeopardy. Recent graduates are used to being able to consult or gain assistance from their school counselors or other high school staff; however, during the summer, that assistance is often not available. The researcher recommends that schools and districts implement a summer transition support plan to assist students in their postsecondary transition. This plan could include the hiring of staff to reach out to students to see if they need assistance, it could involve using nudge technology to communicate with students to "nudge" them to complete their task, or some combination of those strategies. Research by Castleman and Page (2014) explains that messages sent through nudge technology "leveraged several behavioral strategies to positively influence how students engaged in postsecondary planning and, as a result, their ability to successfully enroll in the fall following high school" (p. 115). Nevertheless, it is important that schools and districts begin to fully transition students to their postsecondary destination and implement programming to support these efforts.

Goal-setting and accountability regarding student postsecondary plans and outcomes. High schools and districts are frequently asked to track, calculate, and report on high school graduation rates. This practice began with No Child Left Behind legislation which required states to "measure graduation rates in a standardized way, that they strive toward challenging goals for boosting said rates, and that they hold high schools accountable for not attaining those goals" (Tyner & Munyan-Penney, 2018, p.4). To a certain degree, this has become one of the hallmark pieces of data that is used to evaluate the quality of a high school. Yet, despite increasing high school graduation rates, white students are still enrolling in college at a higher rate than blacks or Hispanics (Perna & Jones, 2013), which can impact career and earning outcomes later in life. Thus,

while graduation rates are important, the researcher recommends that schools and districts engage in goal-setting for student postsecondary planning and should be held accountable to reporting that data for at least one year following a cohort's graduation. The researcher contends that the goals need not be complex, but that they should look at the academic profile of each cohort, and set goals regarding the percentage of students enrolling in 4 year college or university, percentage of students enrolling in 2 year college or technical programs, percentage of students enlisting in the military, percentage of students entering the workforce. These goals are less about steering students in a certain direction, but more about making sure that each student graduates with a plan. After high school, school staff will follow up with students in the previous cohort to see if they did indeed enroll in college, enlist in the military, or enter the workforce. That data would be compiled and reported out, in conjunction with high school graduation rate to provide a comprehensive view of how well students are being educated and supported during their high school experience.

Continued assessment of students' experiences regarding postsecondary planning. To gain an understanding of how students experience postsecondary counseling and planning within schools, seniors (and perhaps their families also) should be asked to take an exit survey. Furthermore, the degree to which students engage in college application behavior, as demonstrated through their coursework, testing, and application completion is a primary factor in their competitiveness in the college admissions process (Kelly, Howell, & Sattin-Bajaj, 2016). The researcher believes this survey, ideally distributed in the latter part of the senior year, could be helpful for schools and districts to assess their progress in assisting students in meeting their postsecondary

goals and promotion college application behavior. This data could then be used to inform strategic priorities and funding, as well as to schools and districts in the process of targeted goalsetting (also recommended by the researcher). Pauken (2016) explained that senior exit surveys are helpful for schools to, "identify 'gaps in service' that emerge from the data and identify trends from one year to the next" (p. 8). It is incumbent upon schools and districts that they not assume that they are doing well in supporting students with postsecondary planning, but instead seek feedback from the students they are serving.

Recommendations for Further Research

There are more studies needed to understand the level to which postsecondary counseling takes place in high schools across the United States. The National Association for College Admission Counseling (NACAC) examines this to a small degree in their annual State of College Admissions report. Building upon their study, or working with NACAC to more widely distribute it would be a start in understanding postsecondary counseling in high schools.

More research is needed on school counseling, as it relates to successful strategies concerning supporting students in pursuing and attaining higher education. While there are a variety of college access programs in existence to assist schools in this endeavor, and research that discusses their impact, there is a lack of information regarding the high impact practices that are used by school counselors, particularly those who are in areas where there are very few college access programs available to support their endeavors.

In addition, the researcher recommends conducting this same study with a focus on gender. When conducting this study, the researcher did not seek to find if there were

any differences in results based on gender. Nevertheless, it would be interesting to see if there are differences in results based on gender, particularly considering that research indicates that women are entering college at higher rates than men. According to the National Center for Education Statistics (NCES) Digest of Education Statistics, in 2015, 72.5 percent of females who recently graduated from high school enrolled in a two-year or four-year college compared to 68.5 percent of males (Snyder, de Brey, & Dillow, 2018).

Also, the researcher recommends conducting student focus groups at the research site as an added resource for future study. The researcher collected only quantitative data from participants; however, speaking to students directly could provide valuable insights beyond that which was captured from the specific survey questions.

Recommendations for Immediate Action

The researcher recommends taking the following immediate actions. First, the research site should continue the use of college advisers from the Carolina College Advising Corps. The second recommendation is to begin the implementation and distribution of a senior exit survey to understand student and families experiences with postsecondary planning as it currently exists. The third recommendation is for the research site to work with the college adviser to examine each cohort of students and set tiered goals regarding the postsecondary planning behavior that they desire for students to demonstrate.

Conclusion

The increase in students enrolling in college who are first-generation, low income, and minority has been documented and recognized in the United States. However, there

are still many talented low-income students who graduate from high school and never apply to college at all (Castleman, Schwartz, & Baum, 2015). It is necessary for high schools to understand the needs of students who fit this demographic as they pursue higher education so that the schools are able to fully support them.

The purpose of this applied research study was to determine the effectiveness of an intervention initiative designed to increase college application and acceptance rates. Specifically, this study assessed the impact of the Carolina College Advising Corps on rural, first-generation, low income, minority students. Following the analysis of the findings, the researcher was able to make specific recommendations to high school administrations and district leaders regarding the further implementation of college and postsecondary counseling.

The results of study indicated that the presence of the Carolina College Advising Corps impacted college enrollment of rural, first-generation low-income minority students who attended schools that were serviced by a Carolina College Advising Corps member. Data revealed from participant responses revealed that adults were assisting students in planning for life after high school. Furthermore, participants reported that most students in their school are planning to go to college and that during the school year they spoke with their college adviser in depth about planning for college.

The study further revealed that the gains from students affected by the presence of the Carolina College Advising Corps in this rural county have been sustained based on the fact that the majority of participants plan to immediately enroll in college following their graduation.

In addition, the researcher recommended that high schools begin to engage in targeted goal-setting for high schools regarding postsecondary initiatives. The researcher also recommends that high schools retain dedicated staff members who are solely responsible for college and postsecondary counseling. School counselors are frequently responsible for other administrative tasks that take away from the time needed to work directly with students. It is essential that students are able to receive guidance so that they are prepared to pursue their postsecondary goals.

Also recommended is the implementation of summer transition support to fully assist students in their transition. Completing all of the tasks necessary to enroll in college can be cumbersome for first-generation students. Being able to receive continued support from their high school during the summer as they prepare to transition can help students secure their plans.

The researcher recommends the use of data-driven efforts to further advance their college and postsecondary counseling through schools engaging in goal-setting and accountability regarding student postsecondary plans and outcomes. Schools should set goals regarding college enrollment, military enlistment, and workforce participation to understand if students are following through on their postsecondary plans. Finally, the researcher recommends that schools assess students' experiences regarding postsecondary planning through the distribution of a senior exit survey.

After the analysis of the findings, two major conclusions surfaced. First, the presence of the Carolina College Advising Corps within the research site had a positive presence on students and their ability to pursue higher education. Second, schools, particularly those with a high population of low-income, first-generation, minority

students, should retain dedicated staff to focus on postsecondary planning and counseling to ensure that students are able to receive personalized support in their pursuit of their postsecondary plans.

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Appendix

Student Survey of the Carolina College Advising Corps

Appendix

Student Survey of the Carolina College Advising Corps

Q1 Dear Potential Survey Participant:

My name is Erin Davis and I am a student at Nova Southeastern University working on my doctoral degree. I am currently writing my dissertation entitled, "A Study of a High School Intervention Program to Increase Access to Higher Education." I am now collecting data in order to analyze and respond to the questions driving this study. I need your help.

The purpose of this study is to examine the effectiveness of the Carolina College Advising Corps in increasing college application and matriculation rates in rural North Carolina. Given that you are a student at a high school in rural North Carolina that has received services from the Carolina College Advising Corps, your feedback would be helpful to me.

This is a one-time anonymous survey that will take approximately 15 minutes to complete. It involves minimal risk to you and presents no harm to you in your everyday life. There is no cost to participate, no payment being made to you, and your participation is strictly voluntary. If you decide not to participate, it will not be held against you and you can exit the survey at any time.

Your responses are anonymous. Information we learn about you in this research study will be handled confidentially, within the limits of the law. This data will be available to the research, the Institutional Review Board and other representatives of this institution. All confidential data will be kept securely in password protected web servers. All data will be kept for 36 months and destroyed after that time by deleting data from all web servers.

If you have questions, you can contact Erin Davis at 919-824-2987 or Dr. Delores Smiley at smiley@nova.edu.

If you questions about the study but want to talk to someone else who is not a part of the study, you can call the Nova Southeastern University Institutional Review Board (IRB) at (954) 262-5369 or toll free at 1-866-499-0790 or email at IRB@nova.edu.

Thank you very much and much success in your future endeavors.
Sincerely,
Erin Davis
If you have read the above information and voluntarily wish to participate in this research study, please click to continue.
Q2 I verify that I am at least 18 years old.
Yes (1)
No (2)
Skip To: Q3 If I verify that I am at least 18 years old. = Yes
Skip To: End of Survey If I verify that I am at least 18 years old. = No
Q3 I consider myself to be a part of one of the following underrepresented minority groups: Black/African-American Native American Hispanic/Latino Asian
O Yes (1)
O No (2)
Skip To: End of Survey If I consider myself to be a part of one of the following underrepresented minority groups: $Black/Afr = No$

Q4. How much do you agree with the following statements?

Question	Strongly Disagree	Disagree	Agree	Strongly Agree
An adult at my school has helped me plan for life after high school.				
I could ask at least one school staff member (teacher, counselor, etc.) to write me a recommendation for a job, program, or college.				
Teachers at my school expect most students to go to college.				
Teachers at my school help students plan for college.				
The curriculum at my school is designed to help me prepare for college.				
Most of the students in my school are planning to go to college.				
Teachers at my school feel it is part of their job to prepare students to succeed in college.				

Q5. Please indicate how often you have did the following during the school year:

Question	Never	1-2 times	3-4 times	5 or more
Met with your college adviser.				
Talked to a college adviser at school in depth about planning for college.				
Attended a college fair or met with a college representative.				
Visited a college or university.				
Visited a college or university that you submitted an application to.				
Reviewed college materials at your school.				
Talked with your parents about future plans.				

Q6. During my time in high school, my COLLEGE ADVISER...

Question	Not at all	A little	Some	A lot
helped me select courses I need for work or admission to college.				
helped me decide what I want to do after I graduate.				
encouraged me to continue my education after high school.				
encouraged me to apply to several different schools.				
talked with me about what college would be like.				
talked to me about colleges/schools suited to my interests and abilities.				
encouraged/ helped me to complete financial aid forms such as FAFSA (Free Application for Federal Student Aid).				
helped me find possible scholarships to apply for.				
helped me decide which schools to apply to.				
helped me write essays or personal statements for college applications.				

Q7. Did your COLLEGE ADVISER discuss the following with you?

Question	Did not discuss	Discussed briefly	Discussed in- depth
Different admissions requirements (four-year colleges vs. two-year colleges, etc.)			
How to decide which college to attend			
How to pay for college			
Your readiness for college-level coursework			
Opportunities to attend out-of-state colleges			
Your likelihood of being accepted at different types of schools			
What grades and test scores (ACT, SAT, etc.) you need to get into different types of schools			

Q8. How helpful was the Carolina College Advising Corps program in making plans for your life after high school?

Answer	
Not helpful	
Somewhat helpful	
Helpful	
Very helpful	

Q9. What are you planning to do in the fall immediately following high school graduation?

Answer	
Continuing my education at a 4-year college	
Continuing my education at a 2-year community college or a technical/vocational school	
Continuing my education in an apprenticeship	
Working	
Joining the military	
Other	

Q10. What is the highest level of education your mother/female guardian has completed?

Answer	
Did not graduate from high school	
Graduated from high school	
Went to college, but did not graduate	
Graduated from a 2-year college or technical/vocational school	
Graduated from a 4-year college	
Graduate degree (MD/JD/Ph.D./MBA)	
Don't know	
Not applicable	

Q11. What is the highest level of education your father/male guardian has completed?

1	
Answer	
Did not graduate from high school	
Graduated from high school	
Went to college, but did not graduate	
Graduated from a 2-year college or	
technical/vocational school	
Graduated from a 4-year college	
Graduate degree (MD/JD/Ph.D./MBA)	
Don't know	
Not applicable	

Q12. Please share any comments that you have regarding the Carolina College Advising Corps