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Baccalaureate Degree Attainment of Students Who Transfer With or Without a Transferable Associate's Degree

Janina Arrington
Old Dominion University

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BACCALAUREATE DEGREE ATTAINMENT OF STUDENTS WHO TRANSFER WITH
OR WITHOUT A TRANSFERABLE ASSOCIATE'S DEGREE

By

Janina S. Arrington
B.S. May 1998, Norfolk State University, Norfolk, VA
M.A. December 2000, Norfolk State University

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Approved by:

Dr. Dana D. Burnett (Chair)

Dr. Mitchell Williams (Member)

Dr. Martha Sharpe (Member)

ABSTRACT

BACCALAUREATE DEGREE ATTAINMENT OF STUDENTS WHO TRANSFER WITH AND WITHOUT A TRANSFERABLE ASSOCIATE'S DEGREE

Janina S. Arrington
Old Dominion University, 2016
Director: Dr. Dana D. Burnett

The purpose of this mixed-methods study was to identify how demographic characteristics (age, gender, and race) impacted baccalaureate degree attainment for transfer students who transferred from a large, public community college located in an urban area in the Southeastern U.S. to two large public universities also located in urban areas in the Southeastern region of the United States. The study also assessed transfer services and support services for transfer students received at a large, public four-year research institution in the same region.

The quantitative phase of this study employed descriptive statistics to analyze the length of time to baccalaureate degree after transfer. Overall, the results indicated that students with a transferable associate's degree are more likely to attain a baccalaureate degree and in a shorter time, although there were some interesting differences when the mediators of age, gender, and race were considered.

The qualitative phase of the study enriched the quantitative results by drawing on the experiences of students who had transferred to one large, public research university. Participants reported experiencing "transfer shock" especially in the form of a lack of systematic advising support for transfer students.

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“I can do all things through Christ who strengthens me.” Philippians 4:13

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CHAPTER I

INTRODUCTION

The evolution of American higher education began in the 1800s through the delivery of industry related academic programs. During the 20th century, the enterprise of higher education was rapidly developing and expanding. As higher education grew, the community college model emerged (Cohen & Brawer, 2008). Community colleges became vital to the American higher education system by providing open access to postsecondary education opportunities (Altbach, Gumport, & Johnstone, 2001). An opportunity of access, community colleges have favorably influenced attainable educational goals in the American higher education system. By offering a wide-range of curricula, community colleges focused primarily on technical programs to prepare students for transfer and earn baccalaureate degrees (Altbach, et al., 2001). Today, transferring from a community college has become a common means for many students desiring to earn a baccalaureate degree.

The role of the community college has become more essential for individuals seeking post-secondary education. During the downturn of the economy, community colleges experienced a surge in enrollment (Worth & Stephens, 2011). As the economy endured a recession, enrollment significantly increased among higher education institutions (Worth & Stephens, 2011). During a declining economy, community colleges became an important mechanism for individuals seeking four-year degrees. However, with a recuperating economy, community colleges are experiencing a decline in enrollment (AACC, 2015). The American Association of Community Colleges (AACC, 2015) attributes declining enrollment to students who attended community colleges previously and are now returning to work, in addition to the

development of new jobs. According to the AACC (2012), community colleges have become vital in fortifying the nation's economy with sustainable education and training programs for evolving career-oriented opportunities. Increased tuition rates among four-year institutions are another reason community colleges serve as a hub of the higher education system. During economic downturns, affordability becomes increasingly relevant as individuals select community colleges as a more reasonable cost option. According to the National Center for Education Statistics, in 2012-13 the estimated cost, excluding room and board, to attend a public four-year institution was \$8,070 and to attend a public two-year institution was estimated at \$2,792. In a report by the state higher education board for a Southeastern state (2013), the average cost of attending a public four-year institution, excluding room and board was \$9,919 compared to \$4,072 to attend a two-year institution. Subsequently, many students attending a two-year institution use these tuition savings as the means for reducing the cost of ultimately earning a four-year degree (Mourad & Hong, 2011). Many students attending a two-year institution intend to earn an Associate of Science (A.S.) or an Associate of Art (A.A.) degree and then transfer to a four-year institution to earn a baccalaureate degree. But, many who attend a community college, transfer without a degree.

Earning an A.A. or A.S. degree and transferring to a four-year institution as a junior is beneficial. With this standing, students are able to prepare themselves academically for the rigor of attending a university and satisfy transferable general education requirements. A means of satisfying these requirements are transfer agreements, often defined as articulation agreements. Articulation agreements have existed in higher education since the 1970s (Mosholder & Zirkle, 2007). The term articulation was primarily used to describe the act of leaving high school and going to college. Articulation has evolved into formal "articulation agreements" established

between two and four-year institutions (O'Meara, Hall, & Carmichael, 2007). The creation of articulation agreements increases the likelihood of baccalaureate degree completion (Falconetti, 2009). Although many students aspire to matriculate to a four-year institution to complete their remaining two years, some are burdened with complicating factors, such as limited counseling and lack of advising about financial resources when transferring to the four-year institution (Long & Kurlaender, 2009). These challenges are impediments influencing graduation after transferring from a two-year to a four-year institution.

Background of the Study

As community colleges continue to offer accessibility and affordability and have relatively lower tuition rates compared to four-year institutions, many individuals will begin their four-year path at the community college. Currently, one community college system located in the Southeastern U.S. has established statewide articulation agreements. Students who earn an associate's degree can utilize a "transfer agreement" that has been negotiated between the community college and four-year institutions. The agreement permits students to complete the first two years of the baccalaureate degree coursework at the community college prior to transferring to finish their baccalaureate degree (Falconetti, 2009).

According to the state council of higher education for this Southeastern state, 7,188 students who earned an associate's degree from a community college in the state's system transferred to public four-year institutions during 2004-2005 to 2008-2009 in the southeastern region. A majority of students from community colleges within the system transferred without completing the associate's degree and earned a baccalaureate degree within four years of transferring (The System, 2009).

Purpose Statement

Community colleges are increasingly becoming a pathway for students to transfer and earn a baccalaureate degree at a four-year institution (Kienzl, Wesaw, & Kumar, 2012). Handel and Williams (2012) suggest approximately 25-35% of all community college students in the U.S. successfully transfer to a four-year institution. Despite the research on community college transfer students and the challenges that impede baccalaureate degree attainment, there is limited research about the persistence of students mediated by age, ethnicity, race, and gender who complete a transfer associate's degree and transfer to a four-year institution and complete a baccalaureate degree.

The intent of this mixed methods study is to determine if selected demographic characteristics are correlated with baccalaureate degree attainment of students who transfer with and those who transfer without a transferable associate's degree from a large, public community college to a large, public four-year research university, located in the Southeastern region of the U.S. Two large, urban public community colleges and two large, public four-year research universities located in the Southeastern U.S. were utilized for the quantitative phase of this study. The qualitative phase of the study was designed to gain awareness on the transfer process and to hear the lived experiences of participants who attended one of the public community colleges and transferred to one of the public research universities in the Southeastern U.S. The study also investigated whether there were differences in demographic characteristics and length of time to complete the baccalaureate degree for students who transferred with a transferable associate's degree and for students who transferred prior to receiving the associate's degree. Two large, urban community colleges and two large, public four-year research universities located in the Southeastern United States (also referred to as "target schools") were evaluated in this study.

Research Questions

This mixed method study was guided by the following questions:

1. What is the effect of age on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
2. What is the effect of gender on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
3. What is the effect of race on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
4. What are the differences in time to complete a baccalaureate degree between students transferring with or without a transferable associate's degree, with respect to age, gender, and race from the target schools?
5. How do community college transfer students assess the transfer experience from one of the two community colleges to one of the two public research universities?

Professional Significance

Community colleges are recognized as the link to the four-year institution for many students who wish to earn a baccalaureate degree. The National Center for Public Policy and Higher Education (2011) reported that community colleges are an access point for students to transfer to a four-year institution to attain a baccalaureate degree. The state where this study was conducted established a transfer policy to enhance partnerships between the state's baccalaureate degree granting institutions and its community colleges in an effort to create seamless processes for students to transfer.

This study will explore whether there are differences in length of time to baccalaureate degree attainment based on student demographic characteristics, and whether or not a student completes the associate's degree prior to transferring. The results of this study will be useful to

higher education leaders, transfer advisors, counselors, and students. This study will provide insight to higher education administrators on the benefits and impact articulation agreements have on baccalaureate attainment. Additionally, the study offers insight about the need to implement programs and resources for students who transfer to four-year institutions.

Community colleges consider the transfer mission an affirming part of the institutional mission.

Hence, strengthening the transfer services and relationships between the two and four-year schools are essential to the overarching institutional mission (Mullin 2012; Townsend, 2001).

Furthermore, transfer advisors, counselors, and students could benefit from information pertaining to students who have completed a transferable associate's degree and those who do not and the percentage of students who complete their baccalaureate degree after transferring.

Overview of the Methodology

The data for this research has been generated by the state's council of higher education. The aforementioned four-year institutions were selected as these schools have the highest transfer population of students from the community college system located in the Southeastern region of the U.S. The sample will consist of students that attended one of the two public research universities who transferred with or without a transferable associate's degree from one of the two public community colleges located in the Southeastern U.S. The independent variables in this study are age, gender, race, and length of time to baccalaureate degree completion. The dependent variable is baccalaureate degree attainment. Comparisons will be made to identify differences in students' demographic characteristics which affect baccalaureate degree attainment. Descriptive statistics will be used to analyze the demographic data.

Definition of Terms

For the purpose of this study, the following definitions are used:

- **Articulation Agreement:** An agreement of courses completed an associate's degree that apply toward a four-year degree program of study (Falconetti, 2009).
- **Associate of Science/Arts Degree (A.S/A.A.):** An academic degree conferred by a two-year institution upon completion of prescribed coursework.
- **Bachelor's/Baccalaureate Degree:** An undergraduate academic degree conferring completion of undergraduate curriculum/major.
- **Community College:** A regionally accredited two-year institution that awards associate's degrees in arts or science (Cohen & Brawer, 2008).
- **Four-Year Institution:** Post-secondary institution offering baccalaureate degrees.
- **Graduate:** Completed a course of study and awarded a degree.
- **Matriculation:** A process by which a student is enrolled for the purpose of realizing the student's educational goal through the college's established programs, policies, and requirements.
- **Non-transfer associate's degree:** A student who has completed fewer than 60 credit hours from the community college and matriculated to a four-year institution.
- **Race:** As defined by the National Center for Education Statistics, the category used to describe groups to which individuals belong, identify with, or belong in the eyes of the community. The race categories that apply are: American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White (NCES, 2016).

- Transfer: The process by which a student moves from a two-year to a four-year institution.

Delimitations

The delimitations of this study include the fact that the study was conducted at two large community colleges, and two large, public research universities located in the Southeastern region of the U.S. The study is further delimited by only examining the outcomes of transfer students who attained the associate's degree. Finally, only selected demographic characteristics of students were tested for significance.

Conclusion

This chapter provided an overview of this study. As transfer from a community college becomes increasingly vital to baccalaureate degree attainment, articulation agreements become more relevant to the transfer process to the four-year institution. The general purpose of the study was to examine the outcomes and student experiences with the transfer, while identifying if demographic characteristics mediate baccalaureate degree completion. In Chapter 2, a review of the literature will include areas of transfer and the transition.

CHAPTER II

REVIEW OF THE LITERATURE

According to Handel and Williams (2012), approximately eight in ten first-time students entering community colleges desire to transfer. While community colleges educate nearly half of the undergraduate population, transfer processes and degree completion have become an increasing challenge to American higher education institutions (AACC, 2013). As policymakers and leaders of community colleges and four-year institutions have grappled with the development of more seamless articulation processes, most states have made attempts to develop articulation agreements that provide effective accessibility to a baccalaureate degree.

The *American Graduation Initiative*, a proposal by President Barack Obama in 2009, addressed the necessity of improving college graduation rates. The initiative also recommended endorsing transfer credits and aligning admission requirements of community colleges and four-year institutions. *Bridging the Higher Education Divide* (2013) addresses attaining this goal of improving graduation rates in American postsecondary education and places the majority of the responsibility on community colleges, considering that five million of the eight million postsecondary degrees will come from community colleges. With the goal of increasing graduation rates, attention must be directed to the impact of transfer policies and student characteristics (i.e., age, gender, and ethnicities) that may affect the seamlessness and success of these efforts.

The two central points of interest in this research topic are transfer and baccalaureate degree completion. This chapter will provide a review of current and historical literature that examines the contextual foundation for the study. Specifically, this chapter will synthesize the

literature with a brief history of the mission of the community college, articulation agreements, transfer policies, transfer process, the academic success of transfer students, and the number of students completing baccalaureate degrees after transferring to a public four-year institution in a Southeastern state in the U.S. The study will also examine the impact of age, gender, and ethnicity, based on students who transfer with the articulation agreement to a four-year institution and the number of students who attain the baccalaureate degree from the first major attempted.

Mission of Community Colleges

From the beginning, the fundamental mission of community college was to provide general education to students in preparation for university level education (Cohen & Brawer, 2003). A shift in the community college mission occurred as a result of the Great Depression, which led to increases in unemployment and, eventually, to the need to provide vocational and technical training for a skilled workforce to satisfy the economic demands of business and community leaders (Cohen & Brawer, 2003).

During the 19th century, the lower-division institutions were called *junior colleges* (Cohen & Brawer, 2003). The first junior college, Joliet Junior College, was established in 1901 as a means for completing two years of post-high school work in preparation for admission to universities (Cohen & Brawer, 2003). From the term junior colleges, the name shifted to *community colleges* as the presence of two-year institutions were recognized for preparation beyond technical and vocational training or transfer preparation, but to also include general and developmental education programs (Cohen & Brawer, 2003). The President's Commission on Higher Education of 1947, known as *The Truman Commission*, focused attention on improving access to higher education and the role of expanding community colleges within the American

higher education system (Gilbert & Heller, 2013). The report addressed the role of democratization of higher education by calling for an end to racial discrimination, diversifying program offerings, and eliminating financial barriers to higher education (Gilbert & Heller, 2013). As junior colleges evolved into community colleges with an increasingly diverse student population, the transfer mission was important for students seeking a baccalaureate degree as a result of universal access and reduced economic barriers. Consequently, a number of students in the 20th century started their postsecondary education in community colleges. The Truman Commission report significantly shaped the role of the community college, providing all people with access to higher education.

The continued roles of the community college in the twenty-first century are to provide open access, offer workforce training programs, meet business and industry needs, and provide transferable degree programs (Townsend & Dougherty, 2006). Although access is one function, the community colleges' goal is to expand opportunities beyond the beginning two years of education (Boggs, 2011). On the other hand, Desai (2012) suggests that maintaining the mission of accessibility of community colleges, while attempting to meet the needs of the progressively growing population of diverse students, can shift the community colleges traditional mission of preparing students to transfer to a four-year institution. Boggs (2011) asserts first-generation, minorities or low-income students have benefited from the open access mission, but the need to improve access and increase success rates for this student population is important.

As community colleges become more diverse in student population and programs, the mission of the institutions becomes more comprehensive. The comprehensive mission of the community college has evolved into providing transfer options to four-year institutions; addressing the expansion of developmental or remedial education programs, dual-enrollment

programs in high schools, distance learning degree programs, and workforce partnerships; and supporting an array of other degree and certificate programs. As the community college mission evolved, transfer has played a significant role in the mission as it serves as a pathway to the baccalaureate degree (Dougherty & Kienzl, 2006; Townsend, 2001).

Another important element of the community college's mission is to provide affordable education (Mullin, 2011). As the largest sector of the U.S. higher education system, community colleges offer education that is cost effective. With tuition and fees steadily increasing among higher education institutions, annual tuition rates at four-year institutions are significantly higher than annual tuition rates at a community college (Shannon & Smith, 2006). In 2009, average tuition rates at a four-year institution were \$7,020 compared to \$2,544 annually at a community college (Boggs, 2011). According to *College Board* (2015), the average tuition rate in Virginia during 2014-2015 for a public two-year institution was \$4,549 compared to \$10,989 at a public four-year institution. Consequently, community colleges have become a viable option for students who are unable to afford to attend a four-year institution, which further enhances access for students seeking postsecondary education.

Many of these factors—low tuition rates coupled with career and transfer degree programs—will add to the continued growth of community colleges in subsequent years. Yet, these variables do not change the mindset of the individuals enrolling; the focus still remains to have an opportunity to obtain post-secondary education, and possibly transfer.

Articulation Agreements

Articulation agreements have been a component of the higher education system for decades (Mosholder & Zirkle, 2007). The primary purpose of articulation agreements is to facilitate the transfer of credits from one educational institution to another (Montague, 2012).

Historically, articulation policies have been the main facilitator for students pursuing baccalaureate attainment (Falconetti, 2009; Wellman, 2004; Roksa & Keith, 2008). However, these coordinated agreements among two and four-year institutions range from state policies to voluntary agreements (Falconetti, 2009). Although the articulation agreements may differ, providing a seamless process from the community college to the four-year institution is essential.

According to the *College Board* (2011), 50% of students entering community colleges are pursuing degrees to transfer to a four-year institution. In order to make this process successful, both institutions must work to devise a curriculum that satisfies the intended transfer process. Furthermore, this relationship must be a collaborative effort to meet the requirements of both the two-year and four-year institutions. Over the years, statewide articulation agreements have grown significantly (Roksa & Keith, 2008). In 1975, only seven states had statewide articulation programs (Mosholder & Zirkle, 2007). Ignash and Townsend (2000) conducted a more recent study to identify how many states have these types of arrangements. The study found that 12 of the 50 states had developed the customary vertical transfer agreement from two-year to four-year institutions. As transfer programs at community colleges emerge, the articulation approach is now more harmonious and considered vital to instituting the articulation process (Bender, 1991; Knoell, 1990).

Although articulation agreements have existed for many years and serve as the gateway to the baccalaureate through its various models of collaboration, very few studies examine the effectiveness of articulation policies (Roksa & Keith, 2008). Roksa (2009) argues that the lack of data collection creates a challenge in examining the effectiveness of articulation policies. Roksa (2009) also suggests that the variation on how articulation policies are defined, either systematically or independently, contributes to the effectiveness of articulation agreements.

Roksa and Keith's (2008) study examined the language of statewide articulation policies and its impact on students' credit hours transferred from the community college to the four-year institution. The intent of their study was to evaluate the purpose of articulation policies as they are intended to safeguard credits in the transfer process from the two-year to the four-year institutions. The study occurred in two stages. In the first stage, the researchers read state statutes for all 50 states. Thirty of the state statutes contained provisions concerning transfer and articulation between the public four-year institutions and the community colleges. In the second stage, the researchers used the Postsecondary Education Transcript Study (PETS) to examine transfer results. This study included students who started at a community college within two years of graduating from high school and who subsequently transferred to a public in-state four-year institution. In this sample, 36% of the students from the community college transferred to a four-year institution ($n = 935$), and 71% of those students transitioned to a public in-state institution ($n = 668$). The researchers concluded there is no increase in baccalaureate attainment for students who transfer in states with articulation policies. With that, the researchers suggested future studies examine transfer credits and the timing of baccalaureate degree completion.

Transfer Policies

Throughout the 50 states, transfer policies are defined in various ways. In the study *Promising Practices in Statewide Articulation and Transfer Systems* (2010), the authors note that disparity among state transfer policies extends to the governing structure, implementation processes, types of transfer policies, and transfer initiatives selected by each state, such as the transferable associate's degree. Governance structures among the 50 states are significantly different. The coordinating and governing boards are "systems boards" responsible for promoting cooperation and coherence among higher education institutions in a state (Davies,

2011). In some states, such as Pennsylvania and Illinois, the public postsecondary education governance structure is managed by both the coordinating and governing boards. In other states, such as Ohio and Hawaii, the same governing board is responsible for public two- and four-year institutions. The governance structure in North Carolina is anomalous, with combined segmental governance between the local boards and the statewide coordinating board—The University of North Carolina Board of Governors (Wellman, 2002). While there are differences in state governance structures on transfer practices and policies, governing boards function as an approach to simplifying transfer for students transitioning from the two-year to the four-year institution.

In addition to the difference in governance structures, there are also differences in state transfer policies. The report *Affordability and Transfer: Critical to Increasing Baccalaureate Degree Completion* (2011) indicates that although state transfer policies exist, policies are continuously developing in numerous states. For example, for transfer students, Texas has a standard general education curricula. Course numbering for general education courses among the public higher education institutions is standard in Texas and Florida. Recently, California endorsed the development of a transfer degree, allowing students from the community college transferring to the state college system guaranteed junior level status. Consequently, students transferring with this degree will have the ability to begin upper division coursework upon transfer. Thus, an established common core of courses seems beneficial for increasing the probability of students transferring.

Roksa (2009) conducted a study to examine different articulation approaches designed to facilitate the transfer. His study found that articulation policies in New York State required two segments of public higher education systems: the State University of New York (SUNY) and the

City University of New York (CUNY) (Roksa, 2009). Traditionally, the CUNY system had the responsibility of implementing individual articulation policies until a statewide articulation policy was developed. With this statewide policy, students graduating with an associate degree from a CUNY community college are guaranteed admission to one of the CUNY senior institutions. Similarly, the SUNY system of independent development of articulation policies has been condensed by increased systematization. In other states, statewide articulation policies are common. Arizona worked with four-year institutions and the community colleges to collaboratively develop a policy allowing students with an associate degree to apply all 60 credits toward their baccalaureate degree. Massachusetts also established a more streamlined transfer system between the four-year institutions and community colleges as a result of the statewide advisory board recommendations (2009). Although there are varying transfer policies and practices, ultimately the aim is to help students successfully transfer.

The State's Transfer Policy

The state's *Policy on College Transfer* (2004) was designed to improve collaboration and provide transfer opportunities for students attending community colleges in the Southeastern region of the U.S. The policy established guidelines that provide a seamless process for students transferring within the state's higher educational system. Those guidelines allow students who complete a transferable associate's degree program, the ability to transfer to a baccalaureate-granting state institution. Upon admission, transfer students intending to enroll in specialized programs or areas requiring specific grade point average and course requirements must satisfy the requirements as outlined. However, the policy indicates specialized programs at the four-year institutions must develop alternate provisions for transfer students to be admitted. Maintaining collaboration and consistency between the two and four-year institution, as

illustrated through the state's policy, benefits both the institution and the students. However, the state policy also suggests that, although the majority of the four-year institutions and community colleges in the state work collaboratively, the objective of establishing a smooth and systematic transfer process has not been fully accomplished.

Transfer and Transfer Rate

Defining transfer and transfer rates can be complex considering its various definitions. According to Cuseo (1998), transfer is defined as a student who moves from one postsecondary institution to another postsecondary institution. This type of transfer is considered "vertical transfer," as students move from two-year to four-year institutions (Cuseo, 1998). Bradburn, Hurst, and Peng (2001) suggest the most common definition of transfer is a student who enrolls at a community college and within five years transfers to a four-year institution. Roksa (2009) provides a broader definition for transfer: "...the flow of students between institutions and programs" (p. 2446).

Transfer patterns have varied start and end points, as some students start at four-year institutions and transfer back to two-year institutions, and then back to the four-year institution. With some transfer patterns, students have attended multiple institutions before completing a bachelor's degree (as cited in Roksa, 2009).

Community colleges are an essential component for those seeking a baccalaureate degree in the U.S. (Sylvia, Song & Waters, 2010). Handel and Williams (2012) reported that over 50 percent of first-time community college students indicate they intend to begin their postsecondary studies at a community college then transfer to a four-year college to earn a baccalaureate degree. As community college students voice their intent to transfer, developing a seamless transfer pathway for students to earn a bachelor's degree is essential (Handel, 2013).

Adelman (1999) asserts the standard form of transfer is to complete, at a minimum, one semester of college credits prior to transferring to the four-year institution, thus increasing baccalaureate degree completion. In contrast, Mellow and Heelan (2008) suggest that completing the associate's degree creates a more seamless transfer. Mellow and Heelan (2008) report that nationally, 43% of the students who transferred after earning associate degrees complete a bachelor's degree within five years, compared with 17% who transferred without a degree. With community colleges experiencing growth over the previous decade (Rhine, Milligan, & Nelson, 2000), the transfer process during this time has steadily improved as more students attend a community college and then transfer to a four-year institution (Dougherty & Kienzl, 2006). Furthermore, Handel and Williams (2012) also submit that transfer has become a primary mission of the community college.

The national transfer rate of 26% has remained stable over the past decade for community college students (Handel & Williams, 2012). Although transfer rates have remained steady, the method of calculation of these rates varies among the states. Hirose (1994) reported that the Center for the Study of Community Colleges developed the most commonly used transfer rate definition as:

All students entering the two-year college in a given year who have no prior college experience and who complete at least 12 college credit units [at that college] within four years, divided into the number of that group who take one or more classes at an in-state, public university within four years.

As a result, transfer rates can be based on those who attend a community college, earn 12 or more credits, and actually transfer to a public four-year institution. This interpretation can be challenging as community colleges have multiple missions and diverse students to serve.

Townsend (2002) argued that identifying which students to include in determining transfer rates is a major challenge. Hence, identifying the percentage of transfer students requires determining the denominator, which are students who could have transferred, and the numerator, which is the number of students who successfully transferred (Gelin, 1999). Some institutions define transfer rates by students that completed a transferable associate's degree (Townsend, 2002). There has been no official position on the calculation of transfer rates by an educational or government entity (Sylvia, Song, & Waters, 2010; Townsend, 2002); thus making the calculation and interpretation of transfer rates problematic.

The report *Bridging the Higher Education Divide* (2013) found that over 80% of students starting at the community college indicate they intend to transfer, and approximately 11% complete the goal of transferring. While many students desire to transfer, declining financial aid support, rising tuition cost at four-year institutions and inconsistent transfer policies can inhibit students from transitioning from the two-year to the four-year institution (National Center for Public Policy, 2011). Monaghan and Attewell (2014) suggest restrictions on the number of transferable credits are roadblocks to students transferring. Furthermore, the policy structure on how transfer is defined—as intended to transfer or transferred—and calculated within a state can have immensely different transfer rates.

According to Handel and Williams (2012), the national transfer rate is around 26%. In California, a report indicated student transfer was relatively low at about 26% for students attending the community college (Horn and Lew, 2007). Subsequently, Horn and Lew (2007) conducted a study to examine which students are counted in the transfer rate. In this study, the researchers used six denominators: completed any transfer credit, 12 transfer credits, halfway milestone of 30 credits, math milestone, transfer ready, and completion of 12 credits and college

math and English. The findings revealed that the transfer rate varies dependent on the target population and defined denominator. Sylvia, Song, and Waters (2010) contend that calculating transfer rates are problematic as there is no valid measure of effective transfer programs. While some institutions define graduating with a transferable associate's degree and transferring to a four-year institution to calculate transfer rates, some institutions base transfer rates on students who attended a community college and enrolled in a four-year institution (Townsend, 2002). With existing challenges in calculating transfer rates, a major collegial conundrum is how or what calculation is used to report transfer rates (Sylvia, *et al.*, 2010). Consequently, determining the criterion for calculating transfer students is essential to the definition of transfer rates.

Wassmer, Moore, and Shulock (2004) conducted a study over a six-year cycle to explore the composition of ethnicity on transfer rates. Two definitions were used in this study to define transfer rate. The first definition—referenced as an “inclusive definition”—used a denominator that included students with no intentions on transferring. The second definition—referenced as “narrower”—used students who completed 12 credits and enrolled in a transferable math or English course. Findings indicated institutions with a greater percent of Latino students had a lower transfer rate as defined by the inclusive transfer rate definition. African-American and Latino students using the narrower transfer rate definition had lower rates. The researchers suggest that these disparities are associated with lack of accessibility to resources and other environmental characteristics (enrollment patterns and full-time employment) as related to these ethnic groups. Nationally, transfer rates have been low and in need of improvement for decades, particularly among first-generation and minority students (Zamani, 2001). While transfer rates nationally have remained constant, in 2004-2009 transfer rates for Latino students were 20%, while African American student transfer rates increased to 25%, which is similar to the national

overall transfer rate (Handel & Williams, 2012). Although minority students demonstrate lower transfer rates, the reporting structure of transfer rate calculations varies among states, institutions, and all racial/ethnic groups.

Demographics of Community College Students

Community colleges serve a unique and diverse population of students. With over half of the undergraduate student population attending community colleges, there has been a notable shift in the demographics of community college students (Mullin, 2012). The National Center for Education Statistics (2016) reported in the fall of 2013 that 73% of students enrolled full-time and 55% enrolled part-time at a public community college were 25 years of age or less. Today, the median age of first-time community college students is 24 years of age (AACC, 2016). Hence, the average age of students attending a community college is getting slightly older.

Community college students are, on average, from a lower socioeconomic group, female, and of a minority race (Handel & Williams, 2012; Long & Kurlaender, 2009; and Mellow & Heelan, 2008). According to the National Center for Public Policy and Higher Education (2011), nationally, 31% of African-American students and 50 % of Hispanic students start at a community college. However, there has been a transformation in the ethnicity composition of community college students with 51% White, 19% Hispanic, 14% Black, 6% Asian, 1% Native American, and 9% of three or more races are unknown (AACC, 2015).

Historically, more men attended college than women (Cohen & Brawer, 2003). During the 1990s the number of women enrolled in community colleges in the U.S. was 56% in comparison to 44% for men (Cohen & Brawer, 2003; AACC, 2015). During the early twentieth century the student population was primarily white, male, and traditional age (Bragg, 2001). In recent decades, women continue to surpass the number of men enrolled in community colleges.

Community colleges enroll more than half of the undergraduates in the U.S. More than half attend part-time, and more than half are first-generation students. They also work 20 hours per week or more (AACC, 2015 & Mullin, 2012). Students attending full-time are more likely to indicate their objective for attending the community college is to transfer to a four-year institution, a greater percentage those attending part time (Handel, 2013).

Demographics of “Intended” Transfer Students

The demographics and population of students intending to transfer to four-year institutions are less likely to be African-American, Hispanic, Asian, Native American, and Pacific-Islanders and academically prepared (Long and Kurlaender, 2009). Jain, Herrera, Bernal and Solorzano (2011) state that minorities comprise the majority of students enrolled in community college, but are in the minority of those intending to transfer.

The *American Association of Community Colleges* (2015) reported that 60% of community college students are women, 52 percent White, 21 percent Black, non-Hispanic, 21 percent Asian/Pacific Islander, and 2 percent Hispanic. According to the state council of higher education for the Southeastern state studied (2009), White, non-Hispanic students have a proportionately larger transfer rate than minority students. Comparatively, the numbers of women who transfer have exceeded the numbers of men who do so. Adelman (1999) and Jain, Herrera, Bernal, and Solorzano (2011) reported that the majority of community college students consist of students of color. While the majority of community colleges consist of students of color, nationally they transfer at a rate below the national average (Jain, Herrera, Bernal, & Solorzano, 2011). The average age of transfer students ranges from 24-29 years of age, with the majority attending part-time (Laanan, 2001; NCES, 2011). Wassmer, Moore, and Schulock (2004) reported transfer rates within a six-year period for African-American and Hispanic

students who intend to transfer are lower than for any other ethnic group. Understanding this disparity is critical, as community college students are usually older in age, from lower socioeconomic backgrounds, and first-generation students (Cohen & Brawer, 2008).

Transfer Transition

The movement from the community college to the four-year institution often comes with challenges for transfer students. According to Zamani (2001), during the last two decades, studies examining the transfer process revealed that the fraction of students transferring from the community college is scarce. Many students transitioning from the two-year to the four-year institution face many challenges, such as inadequate academic guidance and financial assistance, and consequently experience a decline in their grades. When students transfer to the four-year institution, a term coined by John Hills (1965), “transfer shock,” describes a decline in grades once a student transfers from the community college to the four-year institution (Diaz, 1992; Flaga, 2006; and Rhine, Milligan, & Nelson, 2000). Although transfer shock is not uncommon for transfer students, there are a conglomerate of other academic and social challenges that transfer students encounter (Rhine, Milligan, & Nelson, 2000). Rhine et al. (2000) also reported community college transfer students typically experience transfer shock during the first semester after transferring to a four-year institution. Additionally, the authors found most transfer students recover from a drop in academic success after the first semester. Consequently, transfer shock is a temporary phenomenon among transfer students.

While a decline in a GPA is associated with transfer shock, transfer students experience other issues as a result of the transition to the four-year institution. Berger and Malaney (2003) asserted that students also grapple with the collective campus environment. Laanan’s (1996) study examined a selected population of students from California community colleges who

participated in a transfer program, called Transfer Alliance Program (TAP) sponsored by the University of California at Los Angeles (UCLA) College of Letters and Science. The TAP program is a community college honors program with special support not provided to non-TAP students. The study reported that students' interaction with faculty at the community college was considerably different than at the four-year institution. The study found that the academic integration at the community college with faculty felt more approachable as class sizes were smaller, allowing for more involvement with class projects outside of the classroom (Laanan, 1996). Similarly, a qualitative study conducted by Townsend and Wilson (2009) examined the academic and social integration of community college transfer students to a large public research institution. The researchers found students struggled academically as a result of their unawareness of academic and student support services, had difficulties developing relationships with instructors, and experienced the feeling of isolation. Consequently, a student's sensitivity to their academic surroundings in the four-year institutional environment can have an adverse effect on their academic performance. Moreover, experiencing academic alienation from faculty and support services can be an impediment in the transition process for transfer students.

Accurate academic advising prior to transfer is also essential in this process. Laanan's (1996) study found academic counseling at the community college beneficial for students when selecting courses to satisfy the articulation agreement. A study by Allen, Smith, and Muehleck (2013) related to community college students who transferred to a four-year institution revealed dissatisfaction with the advising services received at the four-year institution. The absence of institutional support at the four-year institution suggests academic and social participation by the transfer students are contributors to transfer shock (Flaga, 2006). In a qualitative study examining students' experiences during the transfer process, Owens (2010) provided further

insight into the transition adjustments transfer students may encounter. This phenomenological study explored students' perceptions of transferring from a community college to a large research institution. The emerging themes were technology, social interaction, personal attention, and academic integration. In this study, technology was reported as beneficial and efficient in terms of accessing information related to coursework, communicating with the college community, and ascertaining data from student accounts. The perspectives of social interaction varied as some students perceived the four-year environment as very active with extracurricular activities and involvement, while others deemed the setting as difficult to participate in and become more involved as a non-traditional age student. Furthermore, there were some differences with personal attention, as one non-traditional student referenced having one assigned advisor to develop a one-on-one relationship would be helpful or one who is of the same gender to make the student more comfortable. Additionally, other students echoed this by indicating having an advisor within the academic departments to assist and answer questions for transfer students. Conversely, more students were apprehensive about the academic environment, yet the reflections of maintaining the academic workload and enthusiasm about elevating their academic goals were nearly evenly divided. A significant proportion of the findings revealed that the transfer students struggled with the lack of campus interaction, and others described their difficulties associated with navigating the new campus environment. Consequently, if students are not prepared for the environmental differences with financial assistance and social and academic integration at the four-year institution, these factors can hinder their transition and potentially impact their overall success.

According to Long and Kurlaender (2009), finances and limited collaboration between the 2-year and 4-year institutions are barriers community colleges students encounter in the

transfer process. In the report *The Promise of the Transfer Pathway*, Handel and Williams (2012) identified lack of adequate academic guidance as a major contributor to challenges in the transfer process, in addition to the lack of financial resources. In the report *Transfer as Academic Gauntlet: The Student Perspective*, Handel (2013) found students face difficulty understanding the varied admission, general education, GPA, and pre-major course requirements of articulation agreements, in the transfer planning process. The complexity of different requirements of multiple institutions presents additional unique challenges as most community college transfer students apply to more than one four-year institution. (Mullin, 2011).

Financial barriers present additional challenges for students who transfer. Increasing tuition costs at four-year institutions and limited financial resources make the transition more problematic. Institutional aid typically has not been earmarked for those who transfer as it is for native students, conceivably requiring students to take out more loans. (Handel & Williams, 2012; Townsend, 2007). Considering the shift in student aid to merit-based aid, obtaining financial assistance becomes increasingly challenging for transferring community college students (Boswell, 2004). Similarly, Handel and Williams (2012) reported the shift in merit-based aid favors students with middle-income earnings, although merit aid is generally provided to students based on their academic accomplishments. With a considerable number of transfer students coming from low socioeconomic backgrounds and attending college part-time, financial aid access is disproportionately limited, creating uncertainties with transferring and completing a degree (Boswell 2004; Handel & Williams, 2012). Implications of these financial transfer barriers are impediments, especially for minority and low-income transfer students.

As enrollment continues to grow at two-year colleges for reasons of convenience, low-cost tuition, and more flexible class schedules with day, evening, and virtual classes, students

will pursue transitioning from two-year to the four-year institutions (Hagedorn, et al., 2006; Juskiewicz, 2015). While students attending the community college view this as a logical, less expensive path to the four-year institution, transitioning can be arduous (Berger & Malaney, 2003).

Baccalaureate Degree Attainment

There have been long and heated national debates about improving graduation rates and assisting those entering college with baccalaureate degree attainment. Carnevale, Smith and Strohl (2010) indicate that by 2018, 63% of all jobs in the U.S. will require a postsecondary degree. In recent decades there has been an increase in more students attending higher education (NCES, 2016). For many students, community colleges play a pivotal role in the pathway to postsecondary education and earning a degree. McPhee (2006) reported that during 1999-2000 half of the recipients of baccalaureate degrees attended a community college, and from this group, nearly half obtained an associate's degree prior to transferring to a four-year institution. As Americans seek to advance in post-secondary education, higher education institutions have been challenged with students lacking academic preparedness, strained budgets, and increased tuition costs, which further impacts the path to baccalaureate degree completion. Although community colleges have been recognized as a gateway to baccalaureate degree attainment (Monaghan & Attewell, 2014; Mourad & Hong, 2011), community colleges are also criticized for diverting students from four-year institutions (Doyle, 2009; Leigh & Gill, 2003). Some researchers argue that students who start at a community college are diverted from their goal of baccalaureate degree attainment (Alfonso, 2006; Doyle, 2009; Long & Kurlaender, 2009 & Piland, 1995). Their argument contends that the "democratization" mission of community colleges of providing greater access has the effect of delaying educational attainment (Alfonso,

2006; Roksa, 2009; Rouse, 1995). Leigh and Gill (2003) further assert that offering occupational degrees and certificate training, remedial education, and open door admissions policies channels students away from earning a baccalaureate degree. While there are uncertainties about the pathway to the baccalaureate degree, many students are still transferring from the community college in pursuit of a bachelor's degree (National Student Clearinghouse Research Center, 2013). Although some researchers profile community colleges as a hindrance to baccalaureate degree completion, for many students, particularly minority and non-traditional age, community colleges have become increasingly important as a mechanism to earn a baccalaureate degree.

A study by The National Center for Public Policy and Higher Education (2011) addresses the affordability and transfer pathways of community colleges, further emphasizing the role community colleges play for students seeking bachelor's degree. Findings of this study indicated that low-income students, first-generation students, and students from minority ethnic groups were more likely to enroll in a community college as a point of entry for postsecondary education. With increased tuition costs at four-year institutions during 1999-2009 surpassing the average family income in some states, community colleges remain the most affordable option to baccalaureate attainment. Moreover, as four-year tuition costs increase, community colleges become more attractive and affordable. Additionally, the study indicated with states such as Arizona, California, and Texas expected to have a surge in high school graduates over the next decade, these states will likely rely heavily on community colleges to serve as the pipeline to baccalaureate degree attainment. The study also posited that states should develop effective and consistent statewide transfer policies for transferring students. For example, agreements should be established that guarantee student junior-level status for successfully completing the designated general education course requirements or obtaining the transfer associate's degree.

Hence, the more credits that are transferable and the fewer students who must repeat course credits, the less time is spent at the four-year institution to complete the degree. As more students seek community colleges as a point of entry to baccalaureate degree attainment, inconsistencies in the number of credits accepted at the four-year institution, in addition to increased tuition costs could impact a student's progress toward baccalaureate attainment (2011).

Using national data from the National Center for Education Statistics, Doyle (2006) tracked students who started at a community college in 1995-1996 for six years after their enrollment. Doyle (2006) found that articulation agreements and the acceptance of transfer credits had a positive impact on baccalaureate degree attainment. Doyle (2006) discovered that 82% of students earned a bachelor's degree within six years if the four-year institution accepted all of the credits earned at an articulating community college, but only 42% earned a bachelor's degree within six years if only some of the credits were accepted. Although the vast majority of community college students who start at a community college intend to earn a bachelor's degree, only 21% complete the degree within six years (Doyle, 2009; Alfonso 2006). Long and Kurlaender (2009) analyzed administrative student data from fall 1998 until spring 2007 from the higher education system in Ohio. Of the students who started in the fall of 1998, 60% indicated they intended to transfer to a four-year institution to obtain a baccalaureate degree. Among the students who entered the community college, approximately 44% had dropped or stopped out six years after entering, compared to approximately 34% who started at a four-year institution. Of those who intended to earn a bachelor's degree, only 26% completed a baccalaureate degree within nine years from the date of starting at a community college (2009). Monaghan and Attewell (2014) analyzed a national longitudinal study of first-time freshman entering college to examine the differences of baccalaureate degree completion for two-year

students compared to students who started at the four-year institution. The findings of the study indicated that 46% of students who started at a four-year institution completed a baccalaureate degree within six years, compared to 25% who started at the community college. The researchers maintained that community colleges students are more likely to enroll in remedial coursework, thus slowing the progress toward a bachelor's degree, in addition to the loss of credits upon transfer. The report *Bridging the Higher Education Divide* (2013) revealed that for first-time students starting at the community college 81.4% indicated their intent to transfer and earn a bachelor's degree, but only 11.6% of those who started at the community college earned the degree within six years. However, according to the National Student Clearinghouse Research Center (2013), 60% of transfer students who began their enrollment at a two-year institution from the 2006-2012 academic year obtained a bachelor's degree after transferring. Despite most research suggesting students who start at a community will lengthen their time to earn a bachelor's degree, this data lends some support to examine the demographic differences in baccalaureate degree attainment and facilitate strategies to increase completion for students starting at a community college.

Ethnicity

Within the research related to baccalaureate degree attainment, practitioners have examined the potential disparities among different ethnic groups of students. Understanding the correlation of demographic characteristics to degree attainment is essential as community colleges serve a diverse population of students. Baccalaureate degree completion among citizens of different ethnic groups has caused concerns among educators, higher education leaders, and policymakers (Handel & Williams, 2012). Piland (1995) argues that the graduation rates of students transferring from the community college are contingent upon student characteristics and

degree programs. Males graduated later than females, although over a six-year period, the rates were similar. Conversely, the ethnic composition was mixed as Caucasians, Hispanics, and Native Americans graduated at a faster rate, while, over time, Caucasians, Hispanics, and Asians had the highest graduation rates. The majors of those completing at a faster rate were in liberal arts, specifically, teacher preparation and sciences, although the study did not provide specifics on the actual program in science. Majors with the moderate rates of graduation were undeclared students and those in the engineering. With community colleges disproportionately enrolling a high number of minority students, specifically, 19% Hispanic, 14% Black, 6% Asian/Pacific Islander, and 1% Native American, it appears that these groups are more likely to select the community colleges as a pathway to baccalaureate degree attainment (American Association of Community Colleges, 2014; Mourad & Hong, 2011). To illustrate the point further, Mourad and Hong (2011) conducted a study to explore baccalaureate degree attainment of students who enrolled in a Midwest urban community college, transferred, and completed at least one semester at a four-year research, state, or other institution in the region. This study found a considerable disparity of baccalaureate degree attainment between African-American transfer students, compared to Caucasian transfer students. The graduation rate for Caucasian students was 51%, Asians 44%, and African-Americans 29% percent. African-American students transferring to four-year research or other institutions graduated at a rate 10% lower than Caucasian students. Long and Kurlaender (2009) suggests Black students beginning at a community college are less likely to earn a baccalaureate degree compared to White students. The researchers argue prior academic achievement and preparation impact graduation attainment, hence, increasing the probability of Caucasian students completing degrees more than Black students. Consequently, these results lend credibility to examining degree attainment in relationship to ethnicities.

Gender

According to the American Association of Community Colleges, 57% of the students enrolled in community colleges are women and 43% are men (AACC, 2014). Lee, Mackie-Lewis, and Marks (1993) reported that women attending a community college who transfer to a four-year institution were less likely to earn a baccalaureate degree; this is especially true for Black women. Conversely, a study conducted by Piland (1995) found that females who transfer from a community college earn baccalaureate degrees sooner than males, yet, the completion rates are similar over a six-year time period. And, according to the National Center for Education Statistics (2012), women exceeded men in earning bachelor's degrees after transfer from the community college. The literature indicates that there are more women attending community college and that these women are surpassing males in baccalaureate degree completion upon transfer.

Conclusion

As junior colleges evolved and were subsequently termed community colleges, their mission was to provide access for students into postsecondary education systems. While vocational and occupational education was the primary mission of community colleges in earlier years, the mission increased to include providing opportunities and pathways to obtain a baccalaureate degree. Community colleges have experienced a shift in their student demographic profile and enroll less academically prepared students. Many more of these diverse student enrollees are in pursuit of transfer to enable them to earn a baccalaureate degree (Handel & Williams, 2012; Oseguera, 2005; Townsend, 2007).

This literature review revealed the important role community colleges play in articulation programs, and the social and academic challenges faced by students as they pursue their

educational goals. Despite these obstacles, statewide articulation policies and partnerships can assist in leveraging the transfer adjustments that impact students' baccalaureate degree attainment. Furthermore, as community colleges serve a diverse population of students, additional attention must be provided to the effectiveness of articulation in relationship to student persistence and baccalaureate degree attainment of transfer students based on gender and ethnic groups.

CHAPTER III

METHODOLOGY

The intent of this mixed methods study was to explore selected demographic characteristics of students who transfer with and those who transfer without a transferable associate's degree from two public community colleges located in the Southeastern region of the U.S, and to determine if demographic characteristics are correlated with baccalaureate degree attainment. The study also investigated the differences in demographic characteristics and the length of time to complete the baccalaureate degree for students who transferred with a transfer associate's degree and students who transferred prior to receiving the associate's degree. The second phase of the study was to gain awareness of the transfer process and experience from interviewing participants who attended a public community college in the Southeastern region of the U.S. and transferred to one of two large public research universities located in the Southeastern U.S.

Research Design

The study employed a mixed methods research design using both quantitative and qualitative measures. Creswell (2009) describes mixed methods as a means of integrating quantitative and qualitative approaches to expand the understanding of research. The study will analyze longitudinal transfer data from 2005 through 2011. Quantitative data explored the demographic characteristics of age, gender, and race for students who attended a public community college and transferred to a public research university. Qualitative data were utilized to explore students' experience with the transfer process and the support services received as a transfer student after transfer. Structured open-ended interview questions were utilized. The analysis of the data was used to interpret the effectiveness of transferring with or without a

transferable associate's degree to a four-year university and explore similarities and differences as mediated by the demographic characteristics.

Setting

Two public community colleges located in the Southeastern U.S. were selected for the study, as both of the community colleges have two campuses, with similar institutional profiles, serving as a feeder institution for the public four-year institutions. The two public four-year institutions located in the Southeastern U.S. selected for this study are large, public research institutions within close proximity to the community colleges, with a large amount of transfer students from the two community colleges for this study.

Research Questions

The study explored the correlation of baccalaureate degree completion for community college students who transfer with or without a transferable associate's degree. Hence, the following research questions served as a guide to the study and the development of the methodology. The questions are as follows:

1. What is the effect of age on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
2. What is the effect of gender on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
3. What is the effect of race on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?

4. What are the differences in time to complete a baccalaureate degree between students transferring with or without a transferable associate's degree, with respect to age, gender, and race from a large, urban public community college to a large, public research university located in the Southeastern U.S.?
5. How do community college transfer students assess the transfer experiences from one of the two community colleges to one of the two public research universities?

Study Sample

The selected population sample for this study were students from two public metropolitan community colleges located in the Southeastern U.S. who transfer with or without a transferable associate's degree during the 2005-2011 academic years. The data examined student baccalaureate completion rates after transfer based on student demographic characteristics and degree completion status from two metropolitan public four-year institutions located in the southeastern U.S. The student population originates from two community colleges, both with two campuses, one located in an urban setting, and one located in a suburban setting. Student demographics and baccalaureate degree attainment were collected from the state's coordinating body for higher education for both of the public four-year institutions. Additional sources of data were collected from public four-year residential research institutions.

Data Analysis

The quantitative data utilized to conduct this study was obtained from a state coordinating board of higher education located in the southeastern region of the U.S., collected and then analyzed by the researcher. As mentioned previously, the study sample included data from 2005-2011. The following criteria were analyzed:

1. Students transferring with a transferable associate's degree
2. Students transferring without a transferable associate's degree
3. Transfer students with respect to age, gender, and race
3. Students who graduate with a baccalaureate degree within two years, three years, four years, or beyond

Descriptive statistics were used to investigate the demographic characteristics of community college transfer students and the length of time to baccalaureate degree attainment. Frequencies and percentages were utilized to determine if there was a difference in baccalaureate attainment among the two public research universities for students who transferred with or without a transfer associate's degree based on demographic characteristics. Data included the demographic independent variables age, gender, and race. The dependent variable of baccalaureate degree attainment was analyzed based on the demographic characteristics of age, gender, and race. In examining the demographic characteristics, the frequencies of males compared to females who transfer with or without the transfer associate's degree were recorded from each of the public four-year institutions located in the southeastern region of the U.S. Descriptive analysis was utilized to examine if there was a disparity regarding race groups who transfer with or without a transfer associate's degree. Data were also collected and grouped by age category to calculate frequencies of students who transfer with or without a transfer associate's degree from each of the public four-year institutions located in the southeastern region of the U.S. In addition, descriptive statistics were examined to analyze differences in baccalaureate degree attainment as mediated by the demographic characteristics.

Utilizing descriptive statistics investigated if there were relationships in baccalaureate attainment for students who transfer from the community college with a transfer associate's degree mediated by age, gender, and race.

Qualitative data consisted of individual open-ended interviews with participants to explore the effectiveness of statewide articulation agreements and the transition process to the four-year institution. The interviews were conducted in a naturalistic setting, each lasting between 15-20 minutes. The interviews were recorded, transcribed, and analyzed for recurring themes.

Limitations

The limitations of the study were correlated to comparative data. The study included only students from two specific public community colleges and public four-year institutions in a Southeastern state in the U.S., thus excluding other colleges within this or other regions in the U.S. The student cohort will be limited to specific demographic characteristics, excluding grade point averages (GPA), declared majors, credit hours successfully completed, and enrollment history. Furthermore, the data collected will examine the academic years 2005-2011.

Conclusion

Chapter 3 provided a brief summary on the rationale of this study and purpose for the research questions. Additionally, the chapter included the procedures, population sample, and research design of the study. This chapter also indicated how the demographic characteristics of the students who transfer with or without a transferable associate's degree to two different types of four-year institution were analyzed to investigate baccalaureate degree attainment.

CHAPTER IV

RESULTS

The purpose of this study was to investigate the relationship between the demographic variables of age, gender, and race and the likelihood of degree attainment for students who transferred from two large public community colleges to two large public research universities in the Southeastern U.S. This study also compared degree completion rates of students who graduated with and without transferable associate degrees. The quantitative data collected for this study was analyzed to determine the influences age, gender, and race had on degree completion rates for students who transferred with or without an associate's degree from a large public community college to a large public research university in the Southeastern U.S. Additionally, the data was analyzed to determine if age, gender, and race influenced the length of time to baccalaureate degree completion. The qualitative phase of the study sought to identify the factors that influenced the length of time needed to complete the baccalaureate degree after transferring from the community college.

In order to protect the confidentiality and anonymity of the community colleges and four-year institutions the pseudonyms "a public community college" and "a public research university" are referenced in these findings. All of the participants' direct quotes referencing a community college or four-year institution are in the Southeastern U.S.

The quantitative data collected from the state coordinating board of higher education included students who transferred during years 2005 to 2011 with and without associate's degrees from community colleges. The coordinating board provided an encrypted file to the researcher including data for students transferring between two selected community colleges and the paired four-year public research university in closest proximity to the community college.

The file provided the following data: demographic characteristics (age, gender, and race), the two-and-four-year public institutions attended, transfer with or without transfer associate's degree, baccalaureate degree completion status, and years to baccalaureate degree completion. The sample consisted of 3,547 students, of which 58% had completed a baccalaureate degree from a four-year institution. The demographic characteristics of age, race, and gender were examined to determine any potential influences on degree completion rates. Descriptive statistics were utilized to summarize the results of the collected data. The researcher coded the dichotomous variables, with and without the associate's degree, using the values of zero and one. The value zero represented community college transfer students without an associate's degree, and the value one represented those with an associate's degree. The demographic variables for ages were coded as one for ages 17 to 19 and two age categories, 20 to 24 and older than 24 were combined and coded as zero. For gender, males were coded as zero and females were coded as one. For ethnicity, majority students were coded as zero and students of color were coded as one. The dependent variable, baccalaureate degree attainment, was coded using zero for students who attained a degree and one for students who did not attain a degree to explore the relationship between the demographic characteristics and transferring with and without an associate's degree on baccalaureate degree attainment. In the qualitative phase, data were collected through semi-structured interviews of ten participants from one of the community colleges that had transferred to one of the public research universities. The semi-structured interviews were conducted by the researcher and were audiotaped, transcribed, and coded to identify themes. The purpose of the interviews was to gain a greater understanding of the transfer experience of community college students. The results of this study will inform and provide critical information regarding

transferring from community colleges to four-year institutions for leaders in higher education and students seeking to transfer.

This chapter will present the quantitative and qualitative results of this study. Specifically, a discussion highlighting the results of the descriptive statistics and the implications of these results on the research questions are presented. The qualitative analysis conveyed an additional component to expound on the quantitative results.

Quantitative Results

Research question one. The first research question for this study was:

What is the effect of age on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?

Table 1 shows baccalaureate degree attainment by age range of community college transfer students and associate's degree completion. The age of students for this sample had three categories, ranging from 17 to 19, 20 to 24, and 25 years of age and older. The data indicated 62% of community college students with a transferable associate's degree, among all the age ranges, completed a baccalaureate degree. Only 52% of students who transferred from a community college without an associate's degree had also completed a baccalaureate degree. Of the sample, 65% of students between the ages of 20 to 24 who transferred from a community college with an associate's degree also completed a baccalaureate degree. Fifty-six percent of students between the age ranges of 17 to 19 and 25 and older had completed a baccalaureate degree. The total n for the age ranges 17 to 19 was 2,038 and n for the age range 25 and older was 1,509, although the percentages were identical. Comparatively, 44% of community college transfer students between the ages 17 to 19 and 25 and older did not complete a baccalaureate degree.

Table 1

Percentage of Degree Attainment by Age

Age	<u>With Associate's</u>		<u>Without Associate's</u>		<u>Total</u>	
	BS/BA (n = 1,175)	No BS/BA (n = 714)	BS/BA (n = 859)	No BS/BA (n = 795)	BS/BA (n = 2,038)	No BS/BA (n = 1,509)
17-19	57%	43%	56%	44%	56%	44%
20-24	65%	35%	52%	48%	59%	42%
25 & Older	59%	41%	50%	50%	56%	44%
Total	62%	38%	52%	48%	58%	43%

Note. BS = Bachelors of Science; BA = Bachelors of Arts.

Research question two. The second research question for this study was:

What is the effect of gender on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?

Table 2 illustrates the percentage of degree attainment by gender and associate's degree. Within the sample, 2,038 subjects had obtained a baccalaureate degree and 1,509 subjects had not. Additionally, 64% of females with an associate degree completed a baccalaureate degree as opposed to 60% of male students. Overall, there was minimal difference in baccalaureate degree completion for females and males with and without the associate's degree.

Table 2

Percentage of Degree Attainment by Gender

Gender	<u>With AS/AA</u>		<u>Without AS/AA</u>		<u>Total</u>	
	BS/BA <i>n (%)</i>	No BS/BA <i>n (%)</i>	BS/BA <i>n (%)</i>	No BS/BA <i>n (%)</i>	BS/BA <i>n (%)</i>	No BS/BA <i>n (%)</i>
Female	708 (63.9)	400 (36.1)	528 (54.5)	441 (45.5)	1236 (59.5)	541 (40.5)
Male	471 (60.0)	314 (40.0)	331 (48.3)	354 (51.7)	802 (54.6)	668 (45.4)
Total	1179 (62.3)	714 (37.7)	859 (51.9)	795 (48.1)	2038 (57.5)	1509 (42.5)

Note. BS = Bachelors of Science; BA = Bachelors of Arts.

Research question three. The third research question for this study was:

What is the effect of race on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?

Table 3 shows the percentage of degree attainment by race and associate's degree. The data illustrated that 64% of majority students with an associate's degree obtained a baccalaureate degree and 56% of students of color with an associate's degree obtained their baccalaureate degrees. Nearly half of majority students (53%) and students of color (49%) who did not have their associate's degrees did go on to complete their baccalaureate degrees. This suggests that one out every two students without an associate's degree are likely to complete their baccalaureate degree, regardless of race. Majority students with and without a transferable associate's degree have a higher frequency of attaining a baccalaureate degree compared to students of color. Furthermore, majority students and students of color that complete a transferable associate's degree are more likely to complete a baccalaureate degree.

Table 3

Percentage of Degree Attainment by Race and Associate's Degree

Race	<u>With Associate's</u>		<u>Without Associate's</u>		<u>Total</u>	
	BS/BA (n = 1,179)	No BS/BA (n = 714)	BS/BA (n = 859)	No BS/BA (n = 795)	BS/BA (n = 2,038)	No BS/BA (n = 1,509)
MS	65%	35%	53%	47%	59%	41%
SoC	56%	44%	49%	51%	53%	47%
Total	62%	38%	52%	48%	58%	42%

Note. MS - Majority Students - includes all students reported to a Southeastern state coordinating board with ethnicity of "Not Hispanic" and race as "White," "Unknown," or "Unreported," and non-resident aliens; SoC - Students of Color - includes all students reported to a Southeastern state coordinating board with ethnicity of Hispanic and/or specified race categories other than "White," "Unknown," or "Unreported," and excludes non-resident aliens.

Research question four. The fourth research question for this study was:

What are the differences in time to complete a baccalaureate degree between students transferring with or without a transferable associate's degree, with respect to age, gender, and race from a large, urban public community college to a large, public research university located in the Southeastern U.S.?

Table 4

Years to Baccalaureate Completion by Age

Age	<u>With Associate's</u>			<u>Without Associate's</u>			<u>Total</u>		
	M	(SD)	<i>n</i>	M	(SD)	<i>n</i>	M	(SD)	<i>n</i>
17-19	3.43	(.926)	21	4.01	(1.163)	86	3.90	(1.140)	107
20-24	3.49	(.925)	662	3.72	(1.067)	530	3.59	(.997)	1192
25& older	3.51	(.943)	496	3.67	(1.235)	243	3.56	(1.050)	739
Total	3.49	(.932)	1179	3.74	(1.129)	859	3.60	(1.026)	2038

Table 5

Years to Baccalaureate Completion by Gender

Gender	<u>With Associate's</u>			<u>Without Associate's</u>			<u>Total</u>		
	<i>M</i>	(<i>SD</i>)	<i>n</i>	<i>M</i>	(<i>SD</i>)	<i>n</i>	<i>M</i>	(<i>SD</i>)	<i>n</i>
Female	3.48	(.939)	708	3.66	(1.07)	528	3.56	(.922)	1,236
Male	3.51	(.992)	471	3.87	(1.20)	331	3.66	(1.06)	802
Total	3.49	(.932)	1,179	3.74	(1.12)	859	3.60	(1.02)	2,038

Table 6

Years to Baccalaureate Completion by Race

Race	<u>With Associate's</u>			<u>Without Associate's</u>			<u>Total</u>		
	<i>M</i>	<i>(SD)</i>	<i>n</i>	<i>M</i>	<i>(SD)</i>	<i>n</i>	<i>M</i>	<i>(SD)</i>	<i>n</i>
MS	3.48	(.913)	865	3.72	(1.09)	619	3.58	(.998)	1484
SoC	3.54	(.982)	314	3.79	(1.22)	240	3.65	(1.09)	554
Total	3.49	(.932)	1179	3.74	(1.12)	859	3.60	(1.02)	2038

Note. MS - Majority Students - includes all students reported to a Southeastern state coordinating board with ethnicity of "Not Hispanic" and race as "White," "Unknown," or "Unreported," and non-resident aliens; SoC - Students of Color - includes all students reported to a Southeastern state coordinating board with ethnicity of Hispanic and/or specified race categories other than "White," "Unknown," or "Unreported," and excludes non-resident aliens.

As shown in Table 4, students with an associate's degree completed a baccalaureate degree earlier than those without. Students 17 to 19 years of age with or without the transferable associate's degree complete a baccalaureate degree in 3.90 years. The data also indicates students in this age range without a transferable associate's degree complete a baccalaureate degree in 4.01 years. Additionally, the data illustrates in all three age categories, students without a transferable associate's degree take longer to complete a baccalaureate degree.

In total, there are not great differences in the length of time needed to obtain a baccalaureate degree for males and females who first graduate with an associate's degree, as illustrated in Table 5. However, the results indicate that obtaining a baccalaureate degree takes longer if community college students transfer without an associate's degree. Male students without an associate's degree completed their baccalaureate degrees in 3.87 years. In comparison, male students with associate's degrees took 3.51 years to complete their

baccalaureate degrees. Overall, the length of time to attain a baccalaureate degree is similar for males and females that have an associate's degree.

Table 6 shows students of color take longer to complete a baccalaureate degree with or without a transferable associate's degree. Although majority students without an associate's degree completed a baccalaureate degree in 3.72 years, the results did not illustrate a substantial difference in time to completion for students of color.

Quantitative summary: Age. The relationship between student age and baccalaureate degree attainment was examined. Students between 20 to 24 years of age represented the largest percentage of transfer students with and without a transferable associate's degree. Students in this age range obtained the most baccalaureate degrees compared to other age groups. Moreover, students transferring from community colleges, across all age ranges, with an associate's degree attained baccalaureate degrees in fewer years compared to students without associate's degree.

Gender. Within this sample of community college transfer students with and without associate's degree females represented the largest percentage to complete a baccalaureate degree. Females with associate's degrees completed baccalaureate degrees on average slightly earlier than their male counterparts. Of the community college transfer students, 60% of female students attained a baccalaureate degree compared to 55% of male students. Additionally, female and male students with an associate's degree represented a higher percentage of baccalaureate degree completion compared to those without an associate's degree, as presented in Table 2. The mean length of time to attain a baccalaureate degree was 3.56 years for females compared to 3.66 years for males.

Male students without an associate's degree took the longest time to obtain a baccalaureate degree at 3.87 years.

Race. Transferring with and without an associate's degree did not make a difference in baccalaureate degree attainment between majority students and students of color. The results indicate majority students, regardless of having or not having an associate's degree, are more likely to attain a baccalaureate degree compared to students of color. Furthermore, students of color take longer to attain a baccalaureate degree at 3.65 years, compared to majority students complete at 3.58 years. These results illustrate majority students are more likely to complete a baccalaureate degree in a marginally shorter length of time compared to students of color. Moreover, the length of time to complete a baccalaureate degree regardless of the demographic characteristics age, gender, and race was lengthier for community college students who transferred without an associate's degree.

Qualitative Results

The sample used for this study (research questions three and four) included 10 participants who attended a community college and then transferred to a large public research university in the Southeastern U.S. The qualitative component of this study was guided by the research questions to present the findings and results from the quantitative analysis. The participants' ages ranged from 24 to 60 years of age. Convenience sampling was employed as the researcher had a rapport with the transfer coordinator at a community college. The majority of the interviews ($n = 8$) were held in the researcher's office, and two of the interviews were held in a reserved study room at a university library located on campus. The interviews were recorded using audio memos and a digital voice recorder. The open coding method was used to

analyze participants' responses by reviewing the transcribed data line by line. Each interview lasted between 15-20 minutes. Through the analysis of the transcribed data, the following themes emerged relating to the transfer process: transfer services, advising, challenges, and degree completion. Table 7 displays the participant's demographic characteristics.

Table 7

Participant Demographic Characteristics

Characteristic	<u>Age</u>	<u>Gender</u>	<u>Race</u>	<u>AS/AA</u>	<u>BS/BS</u>
Participant #1	36	M	AA	Y	Y
Participant #2	60	F	AA	Y	N
Participant #3	21	F	C	Y	N
Participant #4	29	M	C	Y	N
Participant #5	28	F	AA	N	Y
Participant #6	43	M	AA	Y	N
Participant #7	41	F	AA	Y	Y
Participant #8	24	M	C	Y	N
Participant #9	33	M	AA	Y	Y
Participant #10	24	F	AA	Y	N

*Note. AA = African American, C = Caucasian; AS/AA = Associates in Science/Associates in Art; BS/BA = Bachelor of Science/Bachelor of Arts; Y/N = Yes/No.

Research question five. The fifth research question for this study was:

How do community college transfer students assess the transfer experience from one of the two community colleges to one of the two public research universities?

Themes. Four common themes emerged: (1) transfer services between institutions, (2) advising received during the transfer process at the community college and research university, (3) challenge experienced during the transfer process, and (4) the length of time to complete the baccalaureate after transferring.

Transfer services. Participants were asked about their familiarity with transfer services at the community college and services received as a transfer student at the public research institution. Each of the participants indicated they learned or were introduced to transfer services at the community college through a referral. The participants indicated the referrals were from various individuals or programs at the community college such as veteran's affairs, marketing instructors, TRiO, administrators, and academic advisors. Participant 1 indicated the Coordinator of Veterans Affairs directed him to the transfer advising office to get the transfer process started. Participant 2 revealed she was informed about transfer services in her marketing class, learned that her instructor was in charge of assisting students with transferring to a four-year institution, and scheduled an appointment to meet with the transfer coordinator and the staff. The participant stated, "For probably two years they guided me through the process looking at different colleges." She also added, "Part of the wonderful service I got from transfer service was assuring me that I wasn't too old and it didn't matter. What they did for me was let me know it was okay and if that was my dream, I should go ahead and pursue it." However, Participant 10 did not express a favorable experience with transfer services and the advisor:

All she did was give me some requirements of credits that would be best for my major. I was in the honors program at the time too. I had to figure out special requirements on like credits that I would need – honors projects you know.

Participant 5 explained that she was informed about transfer services from a staff member in the financial aid office on campus. The participant explained that the financial aid advisor told her about TRiO and said, “This program might be a good fit for you.” TRiO is a federally-funded program to assist and provide services to students who are low-income, first-generation college students or that have a documented disability. TRiO serves as a pipeline to the four-year institution for students who meet any of these categories. Four of the 10 participants indicated that being a student in the TRiO program is how they learned and were introduced to transfer services at the college. Participant 6 was enthusiastic with his first response, stating, “My experience here was great.” Participant 6 learned about the transfer services through the transfer marketing on campus. Participant 6 stated:

I couldn't miss the transfer opportunities, it wasn't something I was thinking about when I started – everywhere you go, throughout the campus and all the buildings – transfer this place, transfer that place, especially if you have to go to the bookstore, everything up and down that hall ...I didn't take a class, where one of the professors didn't talk about when you transfer – it was like they expected you to transfer and educate yourself further from here.

When participants were asked about the services they received at the public research institutions as a community college transfer student, the responses were very similar across research participants. The majority of the participants described a distinct difference between the services received at the different institutions. Participant 3 described transfer services at the

public research institution as “mainly for students who are lost.” She stated, “The community college made it easy for [her],” reflecting on how the transition is much easier if students utilized the transfer office. However, several of the participants indicated they were not aware of services for transfer students at the public research institutions.

Participant One described the services as minimal:

Ummm...I don't really feel like I received any services. The unique thing about my situation, I had a Veterans Affairs counselor – that was the only support system I really utilized. Using your benefits at the community college was different than at the public research institution. The Veteran Affairs counselor at the community college would go over your classes with you, at the public research institution, they just take your paperwork, but I never met with that person.

Participant 7 laughed when asked about the transfer services received at the public research university. Her response was, “None – you are on your own. They did not have specified advisors for your major – every once in a while, but that was not consistent – so you had to rely on yourself, professors and other students.” Participant 6 stated transfer services were a little different at the public research university. He indicated, “If there were services, I am not aware. I don't think there is anything unique for transfer students built in – I get an email.” Participants 3 and 5 indicated that they “really did not seek out services, there were some emails about social gatherings, and there were not many other resources or services offered to transfer students.” Participant 4 described her experience as “cool.” She stated that she “got her own counselor and during preview week they had a section for transfers that was really awesome.”

Advising. The advising theme represents the participants' perception of advising assistance received from the community college and advising assistance and services received from advisors and instructors at the public research institution. Participants 1 and 10 spoke to the articulation agreement as a large part of guiding the advising service they received at the community college. The participants indicated that the articulation agreement outlined all of the classes, course equivalencies, and credit requirements required to transfer to the public research institution, thus optimizing the advising experience. The availability of advisors on campus and the technology tools available through the college's student information system were identified as forms of advising assistance received from the community college. Participant 8 expressed he had a specific advisor at the community college that was linked with the public research university, thus she provided the majority of his transfer advising. The participant also mentioned that "the transfer coordinator helped with all the paperwork and verifying classes I needed that would transfer." Participant 5 indicated that having the advisor go over the advisement report and giving her the curriculum audit sheet was a visual roadmap that made it easier to identify courses required to transfer. Participant 9 stated that, "everything you could think of from the transfer coordinator, TRiO, academic advisors, and even the tutoring center was of tremendous assistance." However, Participant 4 indicated that she was in TRiO and that she received less than optimal advising assistance. She suggested that although she was a part of the TRiO program, she perceived advising as her responsibility:

Not really. I actually did it on my own – all the research, what would transfer who I needed to talk to, I pretty much did. TRiO - if they thought you were going to get in the school they would assist you, but my GPA was not high enough here and they thought I would not get in.

Participant 6 described transfer advising at the community college as helpful, saying “They told me where to go, what to do, what I needed to do.” He found that instructors at the public research institution offered advising assistance and accommodated non-traditional transfer students. He stated, “They have been accessible – not only that when I see them in the hallway, they speak.” Participants echoed the same feeling of instructor’s willingness to communicate or attempt to provide assistance outside of the classroom at the public research university. Nearly all of the participants felt the instructors were welcoming and attempted to assist outside of the classroom and were responsive to questions. Participant 5 described her instructors at the public research university as helpful, but indicated, “many didn’t answer emails much.” Participant 2 stated, “Because I took my courses at the public research university higher education center, I was assigned an academic advisor, and she was very, very helpful and provided some very personalized advising.”

Challenges. When asked about challenges as a transfer student, some of the participants indicated losing some transfer credits; another challenge was in regards to their inability or limited ability to enroll in classes. While most of the participants described the process as seamless, very few of the participants described the transition as difficult. One participant, Participant 4, indicated transferring from the community college to the public research university was a challenge. Specifically, the participant said:

The hardest thing about transferring is when you transfer. When you get to register for classes, and I ended up with all upper-level classes...I wish it could be a point where you know you are graduating, that April point, where you can get right in there, maybe something in there for transfer students so you can get what you need and don’t get stuck with what’s left related to courses.

Participant 8 echoed the same sentiment regarding challenges as a transfer student. This participant indicated:

The classes were a lot larger, that took some getting used to. I didn't know anybody – so it could have been like more resources...it became a hassle and when you are the new people coming in you have the bottom of the selection for courses – the sophomores and seniors get first dibs on all classes, and you are coming in from a community college as a junior.

Participant 5 described housing as a challenge. Specifically, the participant indicated:

I wanted that experience, but housing was not guaranteed for transfer students. Getting used to the class sizes, my first semester was okay, but the second and third semesters, my GPA took a slope. I realized I was not happy and I needed to change my major.

Three participants stated that although there were no obstacles, the classroom sizes were larger and the staff at the community college were more personable and there could be more resources for transfer students at the public research university. Participant 1 was reluctant to state there were obstacles transitioning but expressed some of the challenges were related to adjusting to the classroom sizes and the sense of fitting in with the staff at the public research university. He stated:

The classroom size was definitely a lot larger...the community college staff, they were personable, had an interest versus the public research university. Being at the community college, you develop relationships with staff, advisors, registration – at the public research university you just fill out paperwork and that is it.

Participant 10 explained a major obstacle were some of his credits from the community college did not transfer or apply to any electives, and the requirement to have to repeat those courses at the public research university he had already completed was a challenge.

Each of the participants had varied experiences at the community college, coupled with the challenges experienced during the transition to the public research university, transfer credits, and baccalaureate degree completion. Participant 5 indicated that although she completed 27 credits at the community college, the public research university only took 15 of her credits. She indicated, “I did not earn my degree at the community college, but I wish I did because it would have been a much more seamless process.” On the other hand, other participants attributed earning the associate’s degree and having the 2 + 2 articulation agreement to protecting them from losing credits when they transferred. Although the majority of the participants transferred with an associate’s degree, the length of time to completing the baccalaureate degree varied between two and half years to some of the participants still being currently enrolled.

Degree completion. Participants 1 and 9 completed the baccalaureate degree within 2.5 years after transferring; however, Participant 1 stated, “having a double major at the public research university required an additional semester,” thus extending his length of time to complete the degree. Participant 7 indicated she completed the baccalaureate degree within three years after transferring. Participant 5 stated, “It took me four years after I transferred to finish my degree.” Two participants mentioned attending part-time increased the length of time to completing their baccalaureate degrees. Participant 10 stated, “Attending part-time will increase [his] time to completing his baccalaureate degree.” Participant 6 explained, “Going part-time will take [him] approximately another three to four years to complete the degree.” The other participants are still enrolled at the public research university.

Conclusion

This chapter reported the quantitative and qualitative results of this study. The results of the quantitative data presented descriptive statistical analyses of the relationships between demographic characteristics of baccalaureate degree attainment for community college students who transferred with and without an associate's degree. The results indicated that some demographic characteristics and completing an associate's degree are factors that could contribute to baccalaureate degree attainment. Also, the results indicate degree attainment is longer if community college students transfer without an associate's degree. The qualitative results explored the phenomenological aspects of the students experience transferring between the community college and public research university. The results indicate that the majority of the participants received transfer support at the community college. However, the support received as a transfer student coming into the public research university was not as recognizable or accessible.

CHAPTER V

SUMMARY AND DISCUSSION

This mixed methods study explored how the demographic characteristics of age, gender, and race and transferable associate's degree completion has impacted baccalaureate degree attainment and degree completion times for students transferring from a large, public community college in the Southeastern U.S. to a public four-year institution in the same region. The qualitative component of this study examines community college transfer students' experiences from a public community college to a public four-year research university.

This chapter includes a review of the problem, the purpose statement, a summary of the results, implications, and recommendations. For the first component of this study, a quantitative method was used to compare the baccalaureate degree attainment rates of students based on age, gender, race, and whether or not the student did or did not have an associate's degree. For the second component of the study, a qualitative method—interviews—were used to investigate transfer services between the institutions, advising received during the transfer process at each institution, challenges, if any, that students encountered, and degree completion. In addition, the baccalaureate degree completion times between associate degree-holding transfer students and transfer students without associate degrees were explored to determine if any correlations existed between these variables.

Overview of the Problem

As described in the literature review, community colleges have become a pathway for students who plan to transfer and ultimately earn baccalaureate degrees from four-year institutions. As a result, community colleges are now offering an array of transferable degrees to serve students in achieving this goal. Though many first-time community college students aim to

transfer to four-year institutions, only a small fraction succeeds in doing so – and in earning their baccalaureate degrees (Bailey, Jaggars, & Jensen, 2015).

Purpose Statement

This study aimed to identify the demographic characteristics affecting baccalaureate degree attainment and to examine how demographic characteristics (age, gender, and race) impact baccalaureate degree completion rates and completion times for two groups of students: students with transferable associate's degrees and students without associate's degrees. Two large, urban public community colleges and two large, public four-year research universities located in the Southeastern U.S. were evaluated in this study.

Research Questions

The following research questions guided this study:

1. What is the effect of age on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
2. What is the effect of gender on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
3. What is the effect of race on baccalaureate degree completion rates for students transferring with or without a transferable associate's degree in the target schools?
4. What are the differences in time to complete a baccalaureate degree between students transferring with or without a transferable associate's degree, with respect to age, gender, and race from the target schools?
5. How do community college transfer students assess the transfer experience from one of the two community colleges to one of the two public research universities?

Review of Methodology

This study utilized a mixed methods research design. Quantitative analyses were used to answer the first three research questions. The independent variables of age, gender, race, and associate degree obtainment were used to examine if relationships existed with the dependent variable of baccalaureate degree attainment. Qualitative analyses presented the students' opinions on their transfer experience, the assistance they received, and challenges faced during the transition. Quantitative data was obtained from a state coordinating board system in the Southeastern U.S. and qualitative data was obtained through researcher-conducted interviews with ten community college students who transferred to a four-year institution in this region.

Summary of Results

The study showed differences in baccalaureate degree attainment rates for community college transfer students based on gender. Also, the results demonstrated that student age ranges had an impact on baccalaureate degree attainment for both groups of community college students (those with and without transferable associate's degrees). No significant correlations between student age and length of time to baccalaureate degree attainment was found in either group. However, majority students had higher rates of baccalaureate degree completion among community college transfer students with and without the transferable associate's degree.

Quantitative results. The descriptive analysis of baccalaureate degree attainment rates of community college transfer students showed that students between the ages of 20 to 24 who completed a transferable associate's degree had the highest likelihood of completing baccalaureate degrees at four-year institutions. In comparison, students age 25 and older who transferred to four-year institutions without an associate's degree completed their baccalaureate degree 50% of the time. The average completion rate for community college transfer students

between 20 and 24 years of age without an associate's degree completed their baccalaureate degree with a 52% average rate.

In this study, an analysis of gender showed that 60% of community college students are female and 40% are male. This demographic composition is consistent with the literature reviewed (AACC, 2016; Cohen & Brawer, 2008). The literature suggested that, comparatively, more female students attended community college and were more likely to complete a baccalaureate degree compared to male counterparts. Overall, this study affirmed the coordinating board's findings that more female students are completing baccalaureate degrees, than male students, at public four-year institutions in the Southeastern U.S.

In regards to racial composition, the subjects represented in this study were majority students, not of Hispanic origin, as defined by the state coordinating board. Majority students had the highest percentage of baccalaureate degree attainment among community college transfer students. This study is consistent with other findings describing disparities in baccalaureate completion between majority and minority students (Wellman, 2002; Boggs, 2011) and also consistent with existing literature that suggested a higher percentage of non-Hispanic and African American students do not complete their baccalaureate degree in comparison to White students (Wellman, 2002; Hagedorn, et al., 2006). However, no significant differences in length of time to baccalaureate degree completion were found in this study, despite the existing findings that students of color have disproportionately lower transfer and baccalaureate degree completion rates (Hagedorn, et al., 2006; Monaghan & Attewell, 2014; SCHEV 2004). While there is a divide, as mentioned in the literature, some of the causes for this disparity in baccalaureate degree completion systematically stems from low socioeconomic status and a lack

of understanding the economic value and trajectory of earning a degree. Similarly, the cost of higher education is a major challenge and detractor for students of color.

The results showed that community college transfer students between 17 to 19 years of age completed their baccalaureate degrees within 3.43 years' time, whereas community college transfer students 25 years of age and older took slightly longer, 3.51 years on average. However, this slight difference in average length of time to baccalaureate degree completion is not significant with respect to age.

The analysis results support the existing literature which observes that females attain a baccalaureate degree in a shorter length of time in comparison to males. Furthermore, the literature shows that within the community college transfer student population, females are outpacing males in baccalaureate degree completion (Adelman, 2006; Miller, 2012; Rose & Hill, 2013). On average, females complete baccalaureate degrees in less time, whether with or without a transferable associate's degree.

Overall, the results indicated that community college students aged 17 to 25 years and older who completed transferable associates degrees attained baccalaureate degrees at similar rates. Moreover, the results indicated gender and race as significant contributors to baccalaureate degree attainment, since students of color and males did not demonstrate a higher rate of baccalaureate degree attainment at the public research universities.

Qualitative results. The qualitative portion of this study explored the transfer process and the services students received at both the public community college and public research university. The researcher utilized convenience sampling to select participants for interviews. There were 10 participants for this portion of the study. Participants were students who transferred from one large public urban community colleges to a large public research institution

in the Southeastern U.S. Of the 10 participants, the ages ranged from 21 to 60 years of age, and there were five female and five male participants. Seven of the participants were African-American and the other three were white. Structured interview questions were asked to determine the quality of the transfer services, advising, the challenges faced, if any, and degree completion.

Why students attended a community college. The researcher began each interview by asking each participant why he or she decided to attend community college. Participants indicated accessibility, affordability, and ambiguity about their career paths as driving factors behind their decisions. In addition, participants believed that the community college served as pathways to four-year institutions. The concept of accessibility and indecisiveness with career goals was highlighted by one participant who stated, “I had been out of school for so long, it was suggested I start off at a community college before going to a university and since I lived in the area, it was a logical choice.” Three other participants also echoed the same thinking with one stating, “[I] wasn’t sure and it was the best route to save money and decide what I wanted to do.” Another participant stated, “I grew up in the area, I didn’t know what I wanted to do, so it was easier to go to the community college to figure it out and it was cheaper.” All of these descriptors substantiated the work presented by Jenkins and Fink (2015) that community colleges are essential to those who are unable to pay four-year institution costs and who plan to transfer to earn a baccalaureate degree. Overwhelmingly, each participant suggested that someone recommended they try a community college first.

Theme: transfer services. The theme of transfer services provided by the community college was identified by each of the participants as being important. The participants conveyed that college fairs, marketing materials, transfer field trips, and the ability to meet with the

transfer coordinator eased the complexity of the transfer process. Furthermore, the participants described how administrators, faculty, and staff connected them to an individual to discuss transferring or how to contact student support resources that could assist with transfer.

Similarly, Townsend and Wilson (2008) supported Tinto's (1994) theory that academic and social integration are essential to retaining students in college settings. Presumably, the opportunity, at the community college, to engage with faculty and the availability of transfer activities motivated the participants to persist in transferring to the four-year institutions. Interestingly, results indicated that some of the participants in this study were dissatisfied with the transfer support services received at the public research university. One participant expressed that while the faculty offered support and assistance, administrative staff were less engaged and provided less assistance in connecting students with appropriate resources to support academic success. However, one participant had a memorable experience as she described how she attended preview day at the university and they had a specific section for transfer students where she was assigned a transfer counselor.

Theme: advising. Several of the participants indicated they did not receive or seek advising on a regular basis at the public community college or research university. The participants indicated while at the community college they primarily received advising one to two times a semester or before graduating. Consequently, it is surprising that most participants only went to advising once or twice a semester. One participant, a TRiO student, indicated she went for advising at least once a week. However, this was not surprising to the researcher, having prior knowledge about the structure of the TRiO program.

Each participant felt that advising was nonexistent at the research university. One participant even expressed the inconsistency with who provided assistance as it pertained to class

selections. Moreover, a participant expressed how different the advising was considering the research university had a decentralized advising system, with advising occurring within your major. Subsequently, as in the report by Handel (2011), developing transfer pathways and reaching out to transfer students early to meet with advisors were essential. Handel reported that this process would assist transfer students in completing appropriate courses for their major. The qualitative data indicated that advising, or the lack thereof, was an important factor that led to significant disappointment among participants, particularly at the research institution.

Theme: challenges. Each of the participants described different challenges in relation to the transfer process. Two of the participants recognized that earning transferable associate degrees made it easier to “seamlessly transition” to the public research institution. On the other hand, one participant commented that due to changes in transfer requirements, she did not understand the differences between transferable and non-transferable associate’s degrees. This participant earned a non-transferable degree and felt that her transition was negatively impacted. Another participant found it challenging when all of his music classes did not transfer, considering he had to retake those classes. Other participants expressed a major challenge with registering for courses as a transfer student. It was surprising that community college students with a transferable associate’s degree did not receive the same registration privileges as native juniors. Registration privileges seem to be a challenge that could easily be solved for community college students with a transferable associate’s degree.

Theme: degree completion. Jenkins and Fink (2015) found that of the 25% of community college transfer students, 62% obtain a baccalaureate degree. This varied depending on the type—public or private—of four-year institution to which the students transferred. The participants with an associate’s degree obtained baccalaureate degrees within three to four years after

transferring. This was striking as much of the literature indicated community college transfer students with an associate's degree attain a baccalaureate degree at a lower rate (Alfonso, 2006; Boggs, 2011; and Mullin, 2012).

In summary, the participants' experiences at the public community college were positive. Based on the descriptions, the transfer services received at the community college significantly affected their decision to transfer and their experience during the transfer process. Additionally, findings indicated that public research universities lack a comprehensive process for the transfer process.

Mixed Methods Analysis

The mixed methods approach provided quantitative analysis through descriptive statistics on predictors of baccalaureate completion based on selected demographic characteristics. The quantitative results supported the existing research showing the benefits of establishing articulation agreements and state transfer policies to assist students with obtaining transferable associate's degree prior to transferring to four-year institutions. Furthermore, the quantitative results tested the hypothesis of transferring with and without a transferable associate's degree on baccalaureate completion. The quantitative results are consistent with the benefits of establishing articulation agreements and state transfer policies, although the findings from this study do not directly support transferring on the basis of articulation agreements. Conversely, the quantitative results challenged the literature that race is a predictor of baccalaureate degree attainment (Wang, 2009; Kienzl et al., 2012).

The findings from the qualitative analysis offered insights into community college students' experience of the transfer process. The interviews allowed the researcher to understand the students' reasons for attending community college and the assistance students received in

during their transfer experiences. In addition, the qualitative data assists in explaining the impact of social integration on the impact on the students' experience. The mixed-methods methodology expanded the perspective beyond what is covered by the quantitative analysis to provide a more detailed understanding of how to create a smoother transfer process and what resources are needed to improve student retention and completion rates.

Implications

The existing statewide transfer policies influence the two public, large urban community colleges, and the two public, large urban public research universities involved in this study and the transfer process for students with transferable associates degrees. The results suggested that earning a transferable associate's degree prior to transfer was positively correlated to baccalaureate degree attainment. Differences were found in baccalaureate degree attainment among female and male students, and a notable difference in baccalaureate completion rates was found among those students transferring with and without associate's degrees. These findings suggested that students attending two-year institutions – specifically, male students who intend to transfer to four-year institutions – could benefit from mentorship programs that provide an explanation of the benefits of obtaining an associate's degree prior to transferring to a four-year institution.

Implications for higher education leaders. Baccalaureate degree attainment rates differed between those students who held transferable associates degrees and those who did not. Degree attainment rates also differed between students of color and white students. Although the results did not demonstrate a significant difference in baccalaureate degree completion based on race, the data suggested that white students with or without transferable associate's degrees have a higher probability of completing their baccalaureate degrees. A deeper examination of the

disparity is essential if leaders at two- and-four-year institutions and policymakers are to understand why baccalaureate degree attainment rates differ amongst ethnic populations. Conducting focus groups at four-year institutions could be advantageous for administrators, faculty, and staff who want to provide support to these students and meaningfully engage with these students on barriers and challenges they encounter as college students.

Several participants felt it was difficult to socially integrate into their four-year institutions. Participants described having memorable relationships with academic and transfer advising staff, positive experiences with walk-in advising, transfer fairs, and other student support programs at the community college. In addition, the participants expressed that academic and social integration, made possible by the support of faculty and staff at their community colleges, had a positive impact on their collegiate experience. These findings support Tinto's (1994) theory that academic and social integration results in higher student retention rates.

Transitioning from community colleges to the four-year institutions is not easy for some students. Administrators of four-year institutions should consider establishing an advising process designed specifically for incoming community college transfer students and designating advisors for transfer students in their first year. Advisors at the four-year institutions play a crucial role in assisting transfer students as they navigate the process of transitioning to four-year institutions. Students enrolled in the incorrect courses tend to drop out, resulting in longer completion times and declining baccalaureate completion rates. Additionally, administrators could provide resources for community college transfer students by allowing them to register at the same time as their non-transfer peers.

Recommendations for Future Research

Higher education leaders, state coordinating boards, and policymakers must continue to work in tandem if they are to develop effective articulation agreements between two- and four-year institutions. Although some students are attaining baccalaureate degrees, the majority of the students interviewed for this study reported a lack of transfer support and assistance from their respective four-year institutions. Further research should be conducted to include an exploration of the relationship between baccalaureate degree attainment and the secondary education variable: GED, high school diploma or high school dropout. Additional research could explore whether transfer success differs by academic discipline or academic cluster. Future research should explore the question of why students choose to transfer without transferable associate's degrees. Conducting such a study will assist students with understanding how obtaining a transferable associate's degree facilitates a seamless transition to the four-year institution. Future research should also include qualitative studies that more closely examine differences in baccalaureate degree completion rates between students of color and white students.

Limitations

This study focused solely on three variables: age, gender, and race of the students. Full-time or part-time enrollment was not tracked in measuring the length of time to baccalaureate attainment. The researcher limited interviews to participants who transferred from one large, public community college in the Southeastern U.S. to one of the large, public four-year research universities located in the same region, thus limiting scope. The sample population for this study is also not representative of all community college transfer students in the United States. Specifically, Hispanic Americans, Asian Americans, Native Americans, or Pacific Islanders were

not represented in this study. Lastly, further studies should strive to directly collect data from a broader set of academic institutions to be more representative of the academic institutional landscape.

Conclusion

Community college students with transferable associate's degrees attain their baccalaureate degrees at a higher rate than students who transfer without transferable associates degrees. Therefore, transferring with associate's degrees appears to be advantageous for students. Some of the findings were consistent with existing research and others were not. Although the majority of interview participants indicated that administrators and faculty at community colleges supported their transitions to four-year institutions, all participants perceived administrators and faculty at four-year institutions as being less invested in the transfer process compared to administrators and faculty from community colleges. These findings suggest that administrators at four-year institutions should strengthen efforts to assist transfer students.

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APPENDICES

A - EMAIL REQUESTING STUDENT PARTICIPATION

Dear (student name),

This letter is an invitation to ask you to consider participating in a research project, I am conducting as a doctoral student in the School of Educational Leadership and Foundations at Old Dominion University. Presently, I am in the Community College Leadership program under the supervision of Dr. Dana Burnett, and I need your assistance to complete my research project.

The purpose of this research project will be to explore several aspects of the transfer process for students, who attended a multi-campus community college in Virginia and transferred to a large public four-year institution in Virginia. More importantly, this study will examine students' familiarity with transfer degree programs and articulation agreements, while attending a Virginia community college, their transfer experience, perspective and transition to a Virginia four-year institution.

Participation in this research project is voluntary. However, if you decide to participate in this research project, you will receive a \$10.00 VISA gift card. The project will involve an interview of approximately ten questions, lasting approximately 30 minutes. As a participant you will be asked to select a pseudonym for anonymity. During the interview, you can decline to answer any question, or if you decide, you can withdraw from participating without any consequences. The interview will be audio-recorded to assist the researcher with gathering information and notes. All participants will receive a copy of the transcript to confirm the accuracy of the interview and their privacy.

The benefits of this research will be applicable to higher education leaders at the community college and four-year institution, transfer advisors and/or counselors, and future students attending community colleges with desires to transfer.

This study has been reviewed and approved by the Human Subjects Committee at Old Dominion University. There are no known or anticipated risks to you as a participant in this study.

If you have additional questions about the study to assist you in participating or questions about your rights as a participant, please contact me at jarr009@odu.edu or 757.679.1539. My dissertation committee chair, Dr. Dana Burnett can be contacted at dburnett@odu.edu.

Your willingness to participate in this interview, will enable me to complete my doctoral research and my degree requirements. Hence, your assistance would be greatly appreciated. Many thanks in advance for your support!

Sincerely,

Janina Arrington
Doctoral Candidate
Old Dominion University
School of Educational Foundations & Leadership

Dr. Dana Burnett
Dissertation Committee, Chair
Old Dominion University
School of Educational Foundations
& Leadership

B - CONSENT AGREEMENT FOR RESEARCH STUDY

Informed Consent Agreement for Research Study

Research Topic: Persistence and Baccalaureate Degree Attainment of Students Who Transfer from a Virginia Community College Institution

Purpose of Research:

The purpose of the study is to examine data for students who attended a multi-campus community college in Virginia and transferred to a large public four-year institution in Virginia and graduated with a baccalaureate degree. This study will examine differences in graduation rates based on age, gender, and ethnicity and compare the length of time to complete the baccalaureate degree based on these demographic characteristics.

As a student who transferred from a Virginia Community College to a Virginia four-year institution, you were selected to participate in this study. If you decide to participate, the study involves an interview that will be tape-recorded and conducted in a private location at Thomas Nelson Community College. The interview will require approximately 30 minutes to one hour of your time. As a participant, if you feel uncomfortable at any time during the interview, you have the right to decline to respond to a question or stop answering any additional questions.

As a participant in this study, there are no direct benefits or compensation provided to you for participating in this research study. The information you provide in this study will be handled confidentially by the researcher and stored in password protected file. Additionally, you will be asked to use a pseudonym, which means your name will not be collected.

If you have any questions regarding my research study, contact:

Janina Arrington – Researcher
Old Dominion University
120 Education Building
Norfolk, VA 23529
Email: jarri009@odu.edu

Dr. Dana Burnett - Project Chair
Old Dominion University
120 Education Building
Norfolk, VA 23529
Email: dburnett@odu.edu

Agreement:

I am confirming by signing this form, that I understand the purpose of this interview is to gather information that will be used to conduct a research study for academic purposes. Your signature confirms you have read and understand the above information and consent to participate in this study by signing below.

Print Name

Signature

Date

You will receive a copy of this signed agreement for your records.

C - INTERVIEW QUESTIONS

Interview Questions

Please select a pseudonym to protect your identity for this study.

Warm Up: Tell me a little about how you found out about _____ Community College and why you decided to attend.

- 1) Let's talk about your experience at _____ Community College. How did you find out about services to students wanting transfer to a four-year college?
- 2) What types of assistance did you receive at the community college related to transfer?
- 3) How frequently did you meet with an academic advisor/counselor at the community college in preparation for transfer to the four-year institution?
- 4) Were there any obstacles or challenges you encountered during your transition to the four-year institution?
- 5) Did you earn a transferable Associate's degree in Science or Art from _____ Community College?

If no, how many credits did you earn prior to transferring to the four-year institution?

- 6) Now, let's talk about your experiences at _____ University. What unique support services did you receive at the four-year institution as a community college transfer student?
- 7) Considering the larger class sizes from the four-year institution, how available were your instructors outside of the classroom at the four-year institution?
- 8) Did all of your credits transfer from the community college in the way that you expected?
- 9) Have you completed your baccalaureate degree from _____ University?

If yes, how many years did it take you to complete your baccalaureate degree after transferring from the community college?

If no, when do you expect to?

Thank you for participating in this interview.

VITA

Janina S. Arrington

234 Paradise Drive • Portsmouth, VA 23701 • 757.679.1539 • arringtonj09@gmail.com

Professional Experience

Thomas Nelson Community College, Hampton, VA

Lead Professional Advisor (Associate Director of CHSS Advising)/Coordinator of Student Success Workshops and New Student Orientation Programs (March 2016 – present)

Provide leadership for professional advisors, student advisors, and support staff in the Division of Communications, Humanities, and Social Sciences (CHSS)

Thomas Nelson Community College, Hampton, VA

Interim Director of Advising and Transfer (August 2014 – March 2016)

Supervised and managed the daily operation of the Advising and Transfer Center. Hired, trained and supervised academic advisors, part-time counselors, transfer coordinator, student advisors, and Office Services Assistant. Served as the co-chair of the college's SACSCOC Quality Enhancement Plan (QEP) Steering Committee on Academic Advising.

Thomas Nelson Community College, Hampton, VA

Professional Counselor/Faculty Advising Coordinator (December 2004 – September 2014)

Provided vision and direction for all administrative functions of advising for academic advisors, counselors, and faculty.

Tidewater Community College, Norfolk, VA

Program Coordinator - "Bridges to the Future" (August 2001 – December 2004)

Established and implemented a variety of programs and activities for a federally funded grant program designed to increase the number of minority students entering in the fields of science, technology and mathematics.

Education

Norfolk State University, Norfolk, VA

B.S. in Interdisciplinary Studies, Concentration: Elementary Education, 1998

M.A. in Urban Education, Concentration: Counseling, 2000

Old Dominion University, Norfolk, VA

Ph.D. 2016 Candidate – Community College Leadership