A Quantitative Study of Institutional Attributes that Contribute to Success of Nontraditional Students in Traditional Four-Year Universities and Communities Colleges

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A Quantitative Study of Institutional Attributes that Contribute to Success of Nontraditional Students in Traditional Four-Year Universities and Communities Colleges

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DEDICATION

This study is dedicated to my husband, Terrence Davis. With his support, I am able to achieve more than I ever dreamed.

ACKNOWLEDGMENTS

This adventure of my life has been one I will never forget. There have been many valleys but also many mountain peaks. God's grace has been sufficient through it all. I began this journey to assist those nontraditional students with whom I work daily. Their completion and retention rates motivated me to find ways to help them achieve their educational goals. I look forward to expanding my research with hopes to change policy as it pertains to nontraditional students.

I first want to acknowledge God in this amazing accomplishment. "I can do all this through him who gives me strength," and on those many nights when the tunnel seemed dark he gave me wings like eagles, allowed me to run and not grow weary, and walk and not be faint. He has made my path straight and given me the wisdom I needed in this journey. He is my greatest influence, my foundation, and my life.

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My son, Trent, was a one-year-old when I began this program. There were many nights we worked on our homework together side by side, him on his laptop and me on mine. It is my prayer that you grow to have the same passion about learning as you do today. You can be anything you want to be in life and I believe you are destined for greatness.

My parents, Wilfred and Barbara Morrison, have always put education first in my life for as long as I can remember. My father has even dubbed me as a career student. While I hope that is not the case, I do believe they have sparked a desire for life-long learning. Thank

you for stepping in and helping my family as I pursued this dream. Thank you for instilling in me the confidence I needed to accomplish this goal. I hope I continue to make you proud.

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This voyage to acquire a Doctor of Education degree has challenged me in ways I never thought were conceivable. It has allowed me to research a population I have deep passion for in my pursuit to help others achieve their American Dream. May these findings challenge institutions nation-wide to address these constructs that impact our students in so many ways. I am thankful for the opportunity to learn so much, and I look forward to pursuing new challenges.

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CHAPTER 1—INTRODUCTION

Overview

Nontraditional student enrollment continues to rise every year in the United States (Hussar & Bailey, 2011). With the increased number of nontraditional students entering post-secondary education, institutions of higher education continue to be perplexed about this population as evidenced by their low retention and competition rates (Taniguchi & Kaufman, 2005). The current climate in higher education and the increasing numbers of nontraditional students have forced institutions to research the ways they can assist their nontraditional students to become successful in post-secondary education. Nontraditional student success is important for higher education institutions and for society.

Purpose of the Study

The number of nontraditional students in post-secondary educational institutions continues to rise, and studies forecast the increase will continue in the upcoming years (Advisory Committee on Student Financial Assistance, 2012; Benshoff & Lewis, 1992; Choy & National Center for Education Statistics (ED), 2002; Hazzard, 1993; Horn, 1996). With emphasis on retention and competition, it is critical to determine strategies to assist nontraditional students in degree completion. The overarching research question that guided the research is: What are the institutional factors contributing to the success of nontraditional students? Thus, the purpose of this dissertation was to do the following: identify the college services used by nontraditional students in higher education; determine services nontraditional students express that they desire, but that are not available in higher education institutions; determine how actively engaged nontraditional students are on college campuses; determine to what extent nontraditional students who attend traditional four-year

institutions desire different services than those nontraditional students who attend community colleges do; and identify to what extent nontraditional students who attend traditional four-year institutions differ in their degree of campus involvement from those nontraditional students who attend community colleges.

Problem Statement and Rationale

The United States government is currently demanding that institutions of higher education increase the number of college completers (Berube, 2010). Research shows that high school graduates alone cannot meet the need for a skilled workforce (N. B. Miller, 2014). With the current unemployment rate, the number of students who withdraw from school, and those adults looking for ways to increase household income, it is essential to identify the factors that are barriers to the success of nontraditional students, as well factors that aid in their success.

The American Dream is a phrase coined by James Truslow Adams and is often regarded as the 'good life' (Harper, 2010). It's the idea that you can own a home with a white picket fence and two and a half children. Who doesn't want their slice of the pie, but exactly how do you achieve the American Dream? Many people are taught that education is the ultimate equalizer. (Through hard work and determination you too can achieve the American Dream!) Today, with the changes in the landscape of the economy and the decline in the oil industry for the Southern states, the focus on nontraditional students is more prevalent than ever.

According to the Projections of Education Statistics to 2019 (Hussar & Bailey, 2011), the enrollment numbers for nontraditional college students are projected to increase in the coming years. This report projects that of the number of college students enrolled for the year

2019, over 9,000,000 will be students age 25 and older, and of the number for part time enrollment, over 5,500,000 will be students age 25 or older. Scott and Lewis (2011) argue that "[i]dentifying this recent increase in enrollment and attributing factors is important to note because it demonstrates the need for colleges and universities to gain awareness and sensitivity to the academic and social needs of the increasing nontraditional student population" (p. 2). The increase in the nontraditional student population and their success should be a vital topic for universities and colleges worldwide.

In a report to the U.S. Congress and Secretary of Education, the Advisory Committee on Student Financial Assistance highlighted the importance of nontraditional students to the success of our country. The committee noted that nontraditional college students are the "[l]argest subset of students in the nation" (Advisory Committee on Student Financial Assistance, 2012, p. 1). Furthermore, the committee discussed the effect of nontraditional students on the 2020 goal, a goal that states that the United States would have the highest proportion of college graduates in the world:

> Achieving the 2020 goal among nontraditional students is an undertaking and daunting as the population is large and diverse. The task is made more difficult by two considerations. First, higher education is not structured to serve this population adequately nor are most financial aid programs. Second, unlike that for recent high school graduates, nationally representative data that tracks nontraditional college enrollment and persistence do not exist. (Advisory Committee on Student Financial Assistance, 2012, p. iii)

Nontraditional student enrollment continues to rise, yet institutions of higher education have not invested in the tracking of their success. Louisiana Governor John Bel Edwards

highlighted the importance of nontraditional students to the success and enrichment of the state of Louisiana and the country during the Louisiana Community and Technical College System Conference. Governor Edwards encouraged the faculty and staff to continue to look outside of traditional students to meet the 2020 goals (Edwards, 2016). Governor Edwards is not alone in his beliefs. In the Brookings Institution Report, Berube (2010) also notes the importance of assisting nontraditional students:

> While the share of U.S. adults holding a four-year college degree rose from 24% to 28% from 2000 to 2008, a lower share of 25-to-34 year-olds than 35-to-44 year-olds held a four-year college degree in 2008, a reversal from the pattern in 2000. Nearly a quarter of those younger adults have completed some college, but not a degree. (p. 105)

These rates jeopardize our nation's global competitiveness as well as exacerbate inequality in income distribution. The National Center for Educational Statistics described wages for young adults: "[f]or young adults ages 25-34 who worked full time, year round, higher educational attainment was associated with higher median earnings; this pattern was consistent for 2000, 2003, and 2005 through 2013" (U.S. Department of Education, National Center for Education Statistics, 2015, p. 144). The National Center for Educational Statistics' studies further prove that post-secondary education can pay off monetarily. The search for better paying jobs, personal growth, and numerous other factors motivate nontraditional students to start school each year increasing the population of students yearly. Katopes (2009) acknowledges that there are three main groups contributing (as cited in Kenner and Weinerman, 2011):

> (a) Workers who have lost their jobs because of the recession of 2008 and who require developmental coursework to refresh their entry level collegiate skills, (b) veterans returning from Afghanistan and Iraq who delayed their education to serve in the armed forces and (c) adults who have just completed their GED and are moving onto higher education classes. (GED Classes Being Deluged as Unemployed Seek New Skills., 2009, p. 3)

Post-secondary training allows for students to change career fields, transition from the military to civilian life and break the cycle of poverty. In the report "Education Pays the Benefits of Higher Education for Individuals and Society," Baum and Payea (2005) discuss the benefits of post-secondary education. These benefits include higher earnings, and graduates' ability to recoup the cost of tuition and fees in a relatively short period of time. The authors discuss the contributions of nontraditional college graduates to society: "Successful nontraditional students contribute to lower levels of unemployment and poverty, contribute more to tax revenues, are less likely to depend on social safety-net programs, and are more likely to have positive perceptions about personal health, lower incarceration rates, and higher levels of civic participation" (Baum & Payea, 2005, p. 7). Nontraditional student graduate outcomes suggest that nontraditional students may assist with making their country prosperous.

Research Questions

In this section, the research questions guiding the research will be introduced.

Research Question 1.

What are the college services used by nontraditional students in higher education?

Rationale.

Research shows that support services are important to the success of college students. Moreover, studies about nontraditional students often critique advising and counseling services offered to nontraditional students by higher education institutions, as compared to those services offered by their traditional counterparts (Bauman et al., 2004). Many institutions offer services but do not evaluate their usage. It is the researcher's objective to identify the services nontraditional college students use.

Research Question 2.

What services do nontraditional students express as desired, but not available in higher education institutions?

Rationale.

Most of the research about nontraditional students highlights the benefits of student support services. While most colleges offer support services, many do not evaluate these services to determine if students desire the services provided. Most colleges offer services with the traditional college student in mind. Nontraditional students may desire different services than those desired by the traditional population.

Research Question 3.

How actively engaged are nontraditional students on college campuses?

Rationale.

Numerous studies suggest that there is a positive relationship between student engagement and academic success (Heng, 2014). Most of these studies research the traditional student population and do not take nontraditional students into account. The

researcher would like to test the theory of student engagement on the nontraditional student population.

Research Question 4.

To what extent do nontraditional students who attend traditional four-year institutions differ in their desired support services from those nontraditional students who attend community colleges?

Rationale.

Numerous studies suggest that there is a positive relationship between student engagement and academic success (Heng, 2014). Most of the research focuses on traditional student populations and does not take nontraditional students into account. These studies also do not account for the differences in the types of college attended. The researcher would like to compare the population of nontraditional student who attend traditional four-year institutions to those who attend community colleges to determine if there is a statistical difference in the extent to which the services that these populations desire differ.

Research Question 5.

To what extent do nontraditional students who attend traditional four-year institutions differ in their degree of campus involvement from those nontraditional students who attend community colleges?

Rationale.

Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991). Most of the research that considers traditional student populations does not consider nontraditional students. These studies also do not account for the differences in the types of college attended. The researcher would like to compare the population of

nontraditional students who attend traditional four-year institutions to the population of those who attend community colleges to determine if there is a statistical difference in the extent to which these populations participate in campus activities.

Conceptual Framework

The following conceptual framework represents summation of research on institutional barriers, support services, completion, retention, adult learning theory, and student engagement theory. The success of a nontraditional college student is based on many factors. It is important to clearly define nontraditional students. Nontraditional students are often defined as students over the age of 25. For the purpose of this research, the six categories discussed by Horn (1996) in the report titled "Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence and Attainment Among 1989–90 Beginning Postsecondary" will be used. Horn defined nontraditional students as follows:

> Delays enrollment (does not enter postsecondary education in the same calendar year that the graduate from high school); Works full time (35 hours or more per week) while enrolled; Is considered financially independent for purposes of determining eligibility for financial aid; Has dependents other than a spouse (usually children, but sometimes others); Is a single parent (either not married or married but separated and has dependents); or Does not have a high school diploma (completed high school with a GED or other high school completion certificate or did not finish high school). (Horn, 1996, p. 4-8)

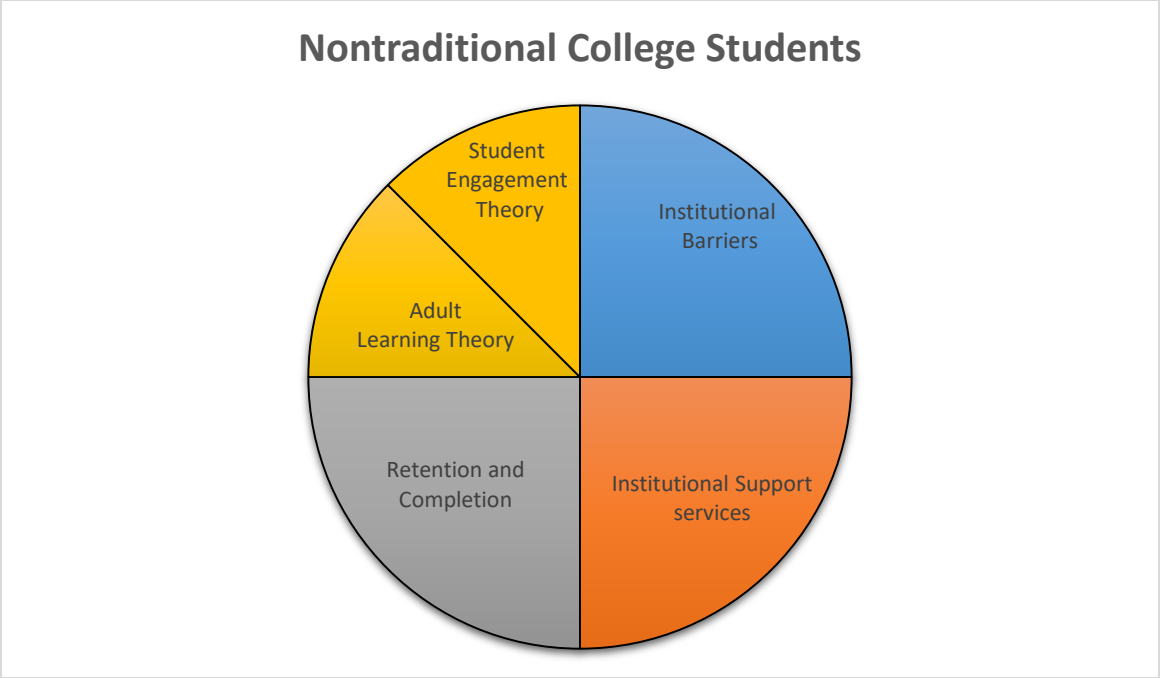

Figure 1. Conceptual framework of factors of nontraditional students' success

Adult learning theory was developed when pedagogy did not meet the needs of adult learners. Student engagement theory researches the effects of campus engagement on academic success. These theories share an equal amount of the graphic representation to account for their effects on nontraditional students.

Nontraditional students are characterized as the "[l]argest subset of students in the nation" (Advisory Committee on Student Financial Assistance, 2012, p. 1). These students face many barriers before deciding to enter post-secondary educational institutions. Once accepted, these students also face institutional barriers. Keith (2007), argues that institutional barriers can cause students stress that can result in withdrawal. Institutional barriers represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success.

Nontraditional college students are capable of success even though the adjustment to college life adds significant stress to the student (Tones, Fraser, Elder, & White, 2009).

Dietsche (2012), reported that college students benefit from college support services. These same services were found to be unavailable to nontraditional students in Tones, Fraser, Elder, and White (2009). Institutional support services represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success.

Goncalves and Truck (2014) argue that nontraditional college student attrition rates are higher than traditional student rates are. Miller (2014) acknowledges the importance of nontraditional student success to institutions nationwide. While the success of this population is important, completion and retention rates continue to be troubling. Completion and retention represent one-fourth of the graphic representation to illustrate the importance on nontraditional student success.

Conceptual and Operational Definitions

The following section defines the conceptual and operational terms that will be discussed throughout the study.

Nontraditional Student

Conceptual Definition.

For the purpose of this research, the six categories discussed by Horn (1996) in the report titled “Nontraditional Undergraduates,” a student who delays enrollment (does not enter postsecondary education in the same calendar year that they complete high school); works full time (35hours or more per week) while enrolled; is considered financially independent for purposes of determining eligibility for financial aid; has dependents other than a spouse (usually children, but sometimes others), is a single parent (either not married or married but separated and has dependents), does not have a high school diploma (completed high school

with a GED or other high school completion certificate or did not finish high school). (Horn, 1996, p. 4-8)

Operational Definition.

Nontraditional student was operationally defined by the responses to the researcher created Nontraditional Student Success Survey.

Barriers

Conceptual Definition.

The Merriam-Webster dictionary defines barrier as a "something that blocks the way or something that keeps apart or makes progress difficult" ("Barrier," 2015).

Operational Definition.

Barriers were operationally defined by the responses to the researcher created Nontraditional Student Success Survey.

Support Services

Conceptual Definition.

Copper (2012), noted that support services are imperative to student academic success. These services should have academic, social, and financial aspects (Cooper, 2010).

Operational Definition.

Support Services were operationally defined by the responses to the researcher created Nontraditional Student Success Survey.

Retention

Conceptual Definition.

Is defined by the Department of Education as the "percentage of a school's first-time, first-year undergraduate students who continue at that school the next year" ("Retention," 2016).

Operational Definition.

Retention was operationally defined by the responses to the researcher created Nontraditional Student Success Survey.

Completion

Conceptual Definition.

Completion is defined as a student who obtains any credential from an institution of higher learning. Credentials include certificate, associate, bachelor's degree, or higher (Marlowe, Ladner, King, & Boggs, 2016).

Operational Definition.

Completion was operationally defined by the responses to the researcher created Nontraditional Student Success Survey.

Significance of the Study

The number of nontraditional students in post-secondary institutions are increasing and higher education leaders are concerned about the troubling retention and completion rates of these students. In 2010, the last year for which numbers are available, the U.S. Department of Education (2012) reported that almost none million adults over the age of 25 were enrolled at degree-granting postsecondary institutions. These numbers are projected to increase to 9.8 million in 2015, and 10.6 million in 2020, representing approximately 43% of the total undergraduate student population (U.S. Department of Education, National Center for Educational Statistics, 2012, p. 286). A study regarding factors that can assist nontraditional student success in institutions of higher education can serve to inform and assist institutions nationwide. Additionally, the impact that the study could have in assisting nontraditional students complete their programs of study may be significant to post-

secondary institutions. Further, the research is intended to add to the literature base regarding nontraditional students and their success, particularly regarding campus support systems.

Assumptions

This study is based upon the following assumptions:

a. The data of this study was collected through surveys of college student perceptions; therefore, it is assumed that participants were reasonably honest about their perceptions of their school experiences.
b. Respondents of participating students were a representative sample for the study.
c. Due to the requirement of voluntary participation of students, colleges did generate sufficient responses to establish valid and reliable means on the various construct measures used.
d. Personal perceptions of survey respondents were assumed to be valid and reliable indicators of the events occurring in the everyday life of their college experiences.

Scope and Limitations

The proposed research follows a quantitative research approach, and involved the use of an anonymous survey. It included a preliminary descriptive examination of the perceptions and experiences of nontraditional undergraduate students. It will be limited to no more than 2000 subjects at two local colleges. The ability to generalize the results of this study may be limited by the size of the population. The requirement of voluntary participation may have prompted responses from students who are more conscientious. Although the literature review examines for-profit colleges and their recruitment of nontraditional students, this research will not explore this phenomenon.

The research is organized in a deductive fashion, initially examining the history and implications of nontraditional students on educational institutions. A thorough review of the policy, initiatives, history, retention, completion, barriers, role conflict, and for-profit colleges pertinent to nontraditional students was conducted primarily through the use of online resources and research within the University of Louisiana at Lafayette library.

Chapter Summary

This chapter provided an overview of nontraditional student college retention and completion. Also included was the conceptual framework which guided this study, the research problems addressed, the purpose and significance of the study, predictive research questions and their rationale, conceptual and operational definitions of the major constructs, and assumptions and limitations of the study. The following section presents a detailed review of the literature essential to the perspective of the study and the study constructs.

CHAPTER 2—REVIEW OF LITERATURE AND RESEARCH

Introduction

Nontraditional college students are a population that has recently come to the forefront as an answer to the nation's lack of skilled workers. Nontraditional college students are able to learn and be successful on college campuses, but they achieve success at a lower rate than their traditional counterparts do.

Characteristics of Nontraditional Students

The National Center for Education Statistics (NCES) has found that the population of nontraditional students is growing at a faster pace than the traditional 18- to 24-year-old student population (Choy & National Center for Education Statistics (ED), 2002, p. 1). Horn (1996) examined different characteristics of nontraditional students. Specifically, in this study, a nontraditional student is one who has any of the following characteristics:

> Delays enrollment (does not enter postsecondary education in the same calendar year that he or she finished high school); Attends part time for at least part of the academic year; Works full time (35 hours or more per week) while enrolled; Is considered financially independent for purposes of determining eligibility for financial aid; Has dependents other than a spouse (usually children, but sometimes others); Is a single parent (either not married or married but separated and has dependents); or Does not have a high school diploma (completed high school with a GED or other high school completion certificate or did not finish high school). (Horn, 1996, p. 8)

While nontraditional students are often defined by age, this particular definition speaks to the population as a whole.

Horn (1996) explains that nontraditional college students can be placed on a continuum based on the number of these characteristics present. Students are considered to be *minimally nontraditional* if they have only one nontraditional characteristic. These students made up 25% to 31% of undergraduates in the three National Postsecondary Student Aid Study (NPSAS) surveys conducted in 1986-87, 1989-90, and 1992-93. These students tended to be older than typical, independent, and to attend part time. Students are considered *moderately nontraditional* if they have two or three characteristics. These students, who made up 25 to 31% of undergraduates in the three NPSAS surveys, tended to be older than typical, independent, and to attend part time. Students are considered *highly nontraditional* if they have four or more characteristics. These students accounted for about one in four undergraduates in the three NPSAS surveys and tended to be older than typical, independent, and to attend part time. Also, about two-thirds of highly nontraditional students either had dependents or worked full time, and about one-quarter were single parents. Horn (1996) reveals that "[o]verall, students who are identified as nontraditional according to these criteria are more likely to be women, to belong to a racial–ethnic minority group, and to have less educated parents than traditional students" (p. 10). Placing nontraditional students on a continuum allows for post-secondary institutions to identify their risk factors and pinpoint ways to ensure success.

Nontraditional students often face obstacles that traditional students do not, as noted in many research articles. Numerous studies have been conducted to examine the effects of the characteristics of nontraditional students on their post-secondary success. Osbourne, Marks and Turner (2004) researched the achievement goals and coping strategies in traditional and nontraditional students:

> In this study, a difference was found between traditional and nontraditional students on emotion-oriented coping as well as in relationships between certain goal orientations and certain coping strategies. Our findings suggest that traditional students may be disadvantaged in comparison to nontraditional students in the sense that they may not be as developmentally prepared, or self-regulating, to cope with the stressors of college. (p. 295)

Nontraditional students can use their unique skillset to be successful in post-secondary institutions.

Although nontraditional students do not comprise a homogeneous group, Osborne, Marks and Turner's research shows that there is a highly motivated cohort of nontraditional students wishing to enter post-secondary institutions. While nontraditional students have multiple roles of responsibility, which carry considerable emotional and financial burdens, this study shows that nontraditional student experiences can serve as advantageous. The Indiana University Center Survey (2006) revealed some interesting statistics in the area of participation and volunteer work of nontraditional students:

> a. Only 47% of nontraditional adult students participated in community service or volunteer work, whereas 69% of traditional-age students took part in volunteer work.
>
> b. Only 12% of nontraditional adult students choose to become involved in research with a faculty member, whereas 23% of traditional-age students worked with faculty on research.
>
> c. Only 27% of nontraditional adult students participated in extracurricular activities. On the other hand, 69% of those traditional-age students choose to become involved in extracurricular activities. (National Survey of Student Engagement, 2006)

The Indiana University Center Survey (2006) also acknowledges the following:

> On the other hand, in the academic arena findings revealed a much higher level of nontraditional adult student participation than traditional-age students.
>
> a. 80% of nontraditional adult learners asked questions in class or contributed to discussions, while only 72% of traditional-age students did so.
>
> b. 61 % of the nontraditional adult students prepared two or more drafts of papers and assignments, while only 40% of traditional-age students complete one draft.
>
> c. Only 13% of nontraditional adult learners came to class unprepared with assignments uncompleted; however, 24% of traditional-age students were coming to class unprepared with incomplete assignments. (*National Survey of Student Engagement*, 2006, p. 17)

Nontraditional college students vary in characteristics; there is no one size fits all. Post-secondary institutions must be aware of all possible characteristics to aid in the success of their nontraditional students. Institutions must also be aware of the nontraditional student experience so that they can develop proper programming and institutional initiatives.

Motivating Factors for Entering Post-Secondary Institutions

Nontraditional students enter post-secondary institutions for numerous reasons. Osborne (2004) claims that "[f]or many adults, the process of deciding to become a student is not a one-off event; rather it is a complex and extended process, and specific factors may have salience at different times" (p. 293). In a study by Davies and Williams (2001), nontraditional students were asked why they chose to become nontraditional students. Students indicated the following:

> (a) interest in the subject to be studied; (b)the chance to enhance career prospects; (c) a wish to improve existing qualifications; (d) a desire to change the direction of their life; (e) the fact that they had always wanted to study but never had the opportunity. (p. 201)

In a survey of over 2,600 nontraditional students, the Student Engagement Insights Survey asked: Why did you choose to (re)enroll in college at this time? The 10 most common answers are as follows:

> (a) They want to enter or transition into a specific field. (b) It's the right time in their lives to do so. (c) They're preparing themselves for today's job market. (d) They want to learn, and hone, particular skills. (e) They want to fulfill their dreams. (f) They want to finish what they've started. (g) They're pursuing an advanced degree. (h) They found the right school. (i) They want to provide for and inspire their loved ones. (j) They simply value and love learning! (Strang, 2014, p. 1)

Nontraditional students often have different motivating factors when they chose to enroll or reenroll in post-secondary institutions. Regardless of the reason, often nontraditional students' post-secondary experiences differ from traditional students' experience. Exposito and Bernheimer argue that "[i]nstitutions of higher learning often create a culture that intimidates, alienates, and puts into question students' sense of belonging and can cause nontraditional students to feel they are being pushed out" (Exposito & Bernheimer, 2012, p. 180). Post-secondary institutions should account for possible reasons nontraditional students enroll to assist with support services.

Nontraditional Student Theories

There will be three theories discussed that pertain to nontraditional student success. They are as follows: Adult Learning Theory, Theory of Student Engagement, and Student Retention Theory.

Adult Learning Theory

Theories are often used as tools for learning in numerous educational settings. These theories have been up for debate for several years. Most theories have been created using a pedagogical framework with little consideration for adult learning theory. Aderinto (2006) acknowledges the history of adults as learners as the following:

> Thorndike (1928), pioneered studies in adult learning which revealed that adults have ability to learn, and thus, providing a launching pad for subsequent studies on the characteristics of adult as a learner. Further studies of Thorndike (1935), and Sorenson (1938), affirmed that adults could learn and even possess interest and abilities that were different from those of children. This theoretical assertion was further reinforced by Lindeman's (1926) systematic theory about adult learning which clearly conceptualize adult learning as that which is situational and not subjects as it is the case of pedagogical learning. (p. 140)

Instructors often find it difficult to apply pedagogical frameworks to adult learners (Aderinto, 2006). Both andragogy and pedagogy refer to the art of teaching. "Andro" means adult and "Peda" means child (Galbraith & Fouch, 2007). Andragogy is a term that was coined by Malcolm Knowles but first used in 1833 by a teacher in Germany and was reintroduced by a German social scientist in the 1920s. The term was further adopted by adult educators in

Europe in 1957 before coming to the U.S. (Thomas, 2001). Pedagogy originated with early monks who chronicled common characteristics among children learning basic facts. Galbraith and Fouch (2007) explains andragogy as follows:

> Andragogic learning designs involve features which recognize the essential maturity of the learner; they are problem-centered rather than content-centered; they encourage the learner to introduce past experiences into the processes in order to reexamine that experience in the light of new data; the climate of the learning process must be collaborative as opposed to authority oriented; planning and evaluation are mutual activities between learner and instructor; evaluation leads to reappraisal of needs and interest and activities are experiential, not "transmittal and absorption" as in standard pedagogy. (Laird, 1985, pp. 125-126 as quoted in Galbraith & Fouch, 2007 p. 35)

During the mid-twentieth century, instructors realized that those observations about how children learn did not apply to adults (Knowles, 1973). Knowles (1984 as cited in Galbraith & Fouch 2007) defines adult learners by two criteria. The criteria for adult learners includes: “1) an individual who performs roles associated by today's culture with adults (e.g., worker, spouse, parent, soldier, responsible citizen); and 2) an individual who perceives himself/herself to be responsible for his/her own life” (p. 36). Knowles (1973) identified common characteristics of adult learners. These characteristics are as follows:

a. Autonomous and self-directed. Trainers should involve participants in the learning process and serve as facilitators, not teachers.
b. Accumulation of life experiences. Adult experiences should be incorporated into the leaning to provide a base of connectivity and relevance.

c. Goal-oriented. Structure training with defined elements that are consistent with the learners' goals.

d. Relevancy-oriented. Set objectives immediately so that learners can relate to the concepts and understand the reasoning behind the objectives, then can apply them in their own lives.

e. Practical. Focus on the "what" and the "why" so adults will apply the lessons that are most useful in their environment.

f. Respectful. Trainers should encourage participants to add value by sharing their experiences and allow for freedom of expression. (p. 35-37)

Alexander (1999, as cited in Galbraith & Fouch 2007) compares the differences between adults' and children's learning experiences. Adults and children differ as follows:

> Children are dependent while adults see themselves as self-directing. Adults expect to be able to answer part of their questions from their own experience and children expect their questions to be answered by outside sources. Children expect to be told what they need to do, while adults may have a very different viewpoint on that issue based on firsthand experience. Adults frequently want input in their learning. Several other differences are important to note and should be applied in an adult learning environment as well. Three such differences are: life experience as a barrier; life experience as a positive trait; and understanding the relevance to their lives. (p. 37)

Galbraith and Fouch (2007) argue that a needs based assessment is the first phase of andragogy which draws on the student's contribution to the content of the material. Vella (2002, as cited in Galbraith & Fouch, 2007) debate that both the teacher and the student

should shape the course content based on the importance and applicability to adults. Vella goes on to discuss the importance of safety to adult learners:

> It is linked to respect for leaners as decision makers and also the trainer's ability to create an inviting environment for adults. A trust in the competence of the design and the instructor, a relevancy of the learning objectives an ability to express thoughts and logic to the sequence oi activities all contribute to a safe learning environment. (p. 37)

Relationships are also important to adult learners. Teachers must be aware that these relationships begin upon the initial meeting, which can foster a sense of inquiry. Galbraith and Fouch argue the importance of learning cognitively: “Learning cognitively, affectively and with psychomotor aspects are principles that are often neglected” (p. 37). Galbraith and Fouch argue that learning with the mind, emotions and actions can reduce the anxiety associated with new events in adult learning.

Galbraith and Fouch (2007) suggest that learners should receive small bits of information at a time. This will prevent learners from becoming overwhelmed and allow for a greater chance of mastery. Thoms (2001), argues that adult learners prefer the “whole-part-whole” learning strategy. This strategy allows for a new skill to be taught, for details to be described, and for concepts to be reinforced.

Theory of Student Engagement

Wolf-Wendel, Ward, and Kinzie (2009), acknowledge that theories and constructs have connected student success, including involvement, engagement, and integration which can serve as a common language and information to inform understanding of the current obstacles facing higher education. Wolf, Ward and Kinzie researched possible reasons for learning and personal development. They argue that: “Research on college students shows

that the time and energy students devote to educationally purposeful activities is the single best predictor of their learning and personal development" (Wolf-Wendel, Ward, & Kinzie, 2009 p. 410). Student engagement has become a major focus of many universities programs and clubs worldwide. Kahn (2014), argues that student engagement has been problematic since the rise of universal forms of higher education. Universities devote time and money to identifying factors that lead to higher levels of student engagement. Trow (2006 as cited in Kahn 2014) acknowledges that with the increase of the age of cohorts attending universities, student engagement rates decline. Wolf-Astin (1984 as cited, in Pascarella & Terenzini 1991) define student engagement as the following:

> Astin (1984) defined involvement as the amount of physical and psychological energy a student devotes to his/her academic experience. This involvement can be both academic and social, though much of the research using the theory of involvement has tended to focus on extracurricular involvement (Hernandez, Hogan, Hathaway, & Lovell, 1999; Pascarella & Terenzini, 1991). (p.410)

Astin (1984, as cited in Wolf-Wendel et al., 2009), hypothesized that the more involved a student is, the more successful they will be in college. He argues that engagement is an investment of psychological and physical energy. This energy occurs along a continuum with students devoting different amounts of energy. The push for research about student engagement comes from a focus on outcome measures. There are numerous surveys that strive to account for student engagement on campuses worldwide. Kahn also highlights that Kun (2008) found links between student engagement and student retention. Kahn also discusses Pascarella's (2010) research that links student engagement to academic performance. Wolf-Wendel, Ward, and Kinzie (2009) note outcome measures that include

increase satisfaction, grades, retention, and graduation. It would seem that higher education institutions could gain a good deal from fostering student engagement.

Wolf-Wendel, Ward, and Kinzie (2009) argue that what a student does in college matters more to what they learn, than whether they graduate, who they are and where they attended school. Astin (1997 as cited in Wolf-Wendel, Ward, & Kinzie, 2009) acknowledges that student engagement is valuable, however, academic involvement (e.g., hours spent studying and doing homework, asking questions in class, studying with other students, completed homework assignments) has more significant effects than other types of involvement. Furthermore, Pascarella and Terenzini (2005) reaffirmed the following: "finding that the impact of college is determined primarily by individual student effort and involvement in the curricular and co-curricular offerings on a campus, though the total impact is also influenced by the campus itself" (Wolf-Wendel et al., 2009, p. 410).

Student Retention Theory

Each year post-secondary institutions look for ways to increase student retention. Wolf-Wendel, Ward, and Kinzie (2009) confer with Tinto's theory of integration. Tinto's theory was distinctive in the field of student development because it was one of the first to look at reasons for voluntary departure from colleges and universities. Tinto (1987) defined integration as follows:

> Students' perceptions of interactions with the peer group, faculty, and staff at the institution as well as involvement in extra- and co-curricular activities. Academic integration refers to perceptions of the experiences in the formal and informal academic system resulting from interactions with faculty, staff, and students inside

> and outside the classroom settings that enhance the intellectual development of the student. (p. 414)

Tinto argues that students need to integrate themselves into the college system. This integration includes social and intellectual connections. Tinto's theory of student integration asserts the following: "The matching between the student's motivation and academic ability and the institution's academic and social characteristics help shape two underlying commitments: commitment to an educational goal and commitment to remain with the institution" (Cabrera, Nora, & Castaneda, 1993, p. 124). Before Tinto's theory, lack of student retention was blamed on individual attributes, skills, and motivation (Tinto, 1987). In their 2014 study, Wendel, Ward, and Kinzie found that successful integration results in retention and unsuccessful integration contributes to withdrawal. They also noted that integration is most important for students in their first year at an institution. Cabrera et al. (1993) critiqued Tinto's theory and found the following:

> A major gap in Tinto's theory and allied research has been the role of external factors in shaping perceptions, commitments, and preferences. This topic is particularly relevant from both a policy analysis and an institutional perspective, given the different social and institutional programs aimed at stimulating enrollment and preventing attrition by addressing variables other than institutional ones (that is, ability to pay, parental support). In spite of this limitation, researchers have found that the Student Integration Model is useful in exploring the role of such external factors as significant other's influence and finances. (p. 124-125)

Wild and Ebbers (2002) introduce learning communities and cohort groups as a structured option for students to engage in their educational process. These groups can be

developed using a program of study or residence and provide the support needed to encourage retention. Retention in nontraditional student populations is problematic, just as it is in the traditional population. Student retention is a contributing factor to nontraditional student success in post-secondary institutions.

Importance of Studying Nontraditional Students and Their Success

The current focus on higher education has placed emphasis not only on degree completion but on student persistence and retention as well. Miller (2014) notes that "[t]he federal government's heightened focus on college completion rates, and pressure to tie state funding to performance metrics, at least partially associated with graduation rates, are catalysts for the discussion" (Miller, 2014, p. 141). With performance now being tied to funding in many states and the continued growth of nontraditional student enrollment, a discussion nationwide has begun about how to help nontraditional students become college graduates. The Association of Public and Land-Grant Universities and the American Association of State Colleges and Universities have vowed to increase college completion rates by 3.8 million students by 2025. The association realized that this goal is unobtainable without focusing on nontraditional students. Their main strategy is to "[m]ake a concerted effort to reach out to former students who have attended our institutions but who have not earned a baccalaureate degree from any institution" (The Association of Public and Land-grant Universities, n.d., p. 1). The students targeted by the Association of Public and Land-Grant Universities and the American Association of State Colleges and Universities are often referred to as nontraditional students (Horn, 1996). With the current decrease in higher education funding, institutions have begun looking for funding from outside agencies. These agencies are not concerned with just enrollment numbers but with completion rates as well.

With organizations like Lumina Foundation, the College Board, and the Bill and Melinda Gates Foundation providing funding, completion is paramount not only for the student but for the country as a whole. The College Board has identified college completion as a significant factor in revitalizing the United States' economy (College Board, 2008). Reyna (2010) highlights the National Governors Association plan for states as follows:

> In 2010, the National Governors Association (NGA) noted the importance of increasing the number of college graduates in their Complete to Compete plan (2010). This initiative charged state governments to focus on policy decisions that will encourage postsecondary completion. The suggested measures included working toward a measure of college completion that factors in efficiency, technology use, and emerging delivery modes to reduce time-to-degree. (p. 9)

The National Governors Association understands that college graduates will help to rejuvenate the nation's economy. The encouragement to find ways to help students reach completion should also apply to the large number of nontraditional college students currently enrolled in post-secondary institutions and those seeking to further their education. Organizations like the Lumina Foundation understand that a focus should be placed on adult learners as an answer to the college completion problem:

> The Lumina Foundation (2012) suggested that increasing enrollments among adult students who did not attend college immediately following high school could add 1.5 million college graduates to the national total. In addition, if 10% of the adults who attended college but never finished returned to complete a degree, the result would be 3.6 million more college graduates. (Matthews & Lumina Foundation for Education, 2012, p. 3)

Additionally, the College Board (2008) notes that the shortage of skilled workers cannot be met by high school graduates alone. Reyna (2010) argues that "[t]o address this, adult learners need to be connected with educational opportunities, in order to qualify for skilled positions" (p. 9). The numerous job listings cannot be filled due to the lack of skilled workers, which is a complaint made by business owners and major companies alike. To prepare the workforce for tomorrow's jobs, we must increase the completion rates for nontraditional students. Historically, traditional students have higher completion rates than their nontraditional counterparts. Shaprio acknowledges that "[t]here is a gap in the achievement of traditional and nontraditional students. Traditional-age students have a higher six-year completion rate than nontraditional students" (p. 2). With low completion rates, nontraditional students leave before degree attainment and often in student loan debt.

The increase in nontraditional students in post-secondary institutions should equate to an increase in studies of nontraditional students. Unfortunately, this is not the case. In a report entitled "Measuring Nontraditional Student Success: An Imperative for Colleges and Universities" (2012) from the University Professional and Continuing Education Association, the UPCEA notes that universities have dropped the ball with nontraditional student data:

> The UPCEA reports that 77% of colleges and universities do not track degree completion rates for their nontraditional students. The shortfall in tracking this data at the institutional level helps explain the lack of relevant national data. In addition to graduation and retention rates, there is also a gap in the collection of data for other key performance indicators, such as persistence and progression rates. (University Professional and Continuing Education Association Center for Research and Consulting, 2012, p. 2)

Post-secondary institutions must track nontraditional student data to increase their success. A lack of data does not hold the institutions accountable for nontraditional student success.

The push to increase nontraditional student enrollment and success will affect all staff and faculty of higher education institutions. Donavant, Daniel, and MacKewn (2013)argue that "[i]ncreasing enrollments of adult learners holds policy implications for faculty, administrators, and state policymakers" (p. 133). Furthermore, the National Center for Higher Education Management Systems (2009), found that colleges don't account for their adult learners when developing policy and procedures. The report noted the following:

> In its review of current practices affecting college access, success, and productivity, the Tennessee Higher Education Commission (THEC) identified several obstacles across the state impacting the enrollment, retention, and graduation rates of the growing population of adult students. THEC's analysis revealed an overall lack of regard for adult learners as a unique demographic in undergraduate classrooms on Tennessee college campuses. (p. 15)

The success of nontraditional students must have buy-in from post-secondary institutions as well as policy makers. Obstacles must be removed, and support services must be added to increase retention and completion rates. Post-secondary institutions can no longer explain away nontraditional students as a fad, but must realize the phenomenon is here to stay.

Performance of Nontraditional Students in Post-Secondary Institutions

The landscape of post-secondary institutions is shifting nationwide due to economic and social changes. In addition, policies on widening participation and promotion of lifelong learners has led to a system shift (Merrill & Tett, 2013). This current shift to lifelong learners has continued to diversify post-secondary institutions and highlights the retention

and competition rates of each institution. Competition and retention affect institutions, policy and funding worldwide.

Retention

Retention is problematic for colleges and universities worldwide. There are numerous studies about traditional students and ways to increase their retention rates. Nontraditional students do not have the same attributes as traditional students and should be looked at independently. Institutions must individually view retention as of the utmost importance and make it part of their culture. Kurantowicz and Nizinska (2013) discussed the steps an institution should take to promote a culture of student retention:

> Firstly, the institution must have a consciousness level sufficient to recognize the need for support systems for the non-traditional students and act accordingly, implementing suitable solutions. Secondly, the institution must develop procedures and an atmosphere which facilitates designing appropriate solutions in a democratic process that encompasses students' involvement, inter-learner negotiations and sound management policies. (p. 140)

Sadly, this was neither case in their 2013 study nor is it the case nationwide. Kurantowicz and Nizinska (2013) found that the lack of campus supports fostered relational retention practices. In circumstances such as these, nontraditional students find support from other people, and this support is usually the only encouragement that sustains and enhances nontraditional students' perseverance. Kurantowicz and Nizinska argue that “[t]his type of retention practice is underpinned by social skills and the ability to connect with other people in a new situation or in moments of difficulty” (p. 141). While this practice can be successful, its dependence on personality type is strong and could require many

nontraditional students to step out of their comfort zone which could already be stretched by just enrolling in school.

Howell (2001) discusses the disadvantages nontraditional students begin with: "[t]hese students are inadequately prepared, academically and psychologically, for college-level work" (p. 2). Adams (2015) notes that unprepared students do poorly on college placement exams and often choose not to enroll in college once they are informed they must take remedial courses. Studies show that students who enroll in remedial classes often drop out before completion (Young, 2002).

Wyatt (2011) discusses the challenges of nontraditional students and mentions that these obstacles are often amplified when there is a lack of belonging or connection to the institution. Wyatt notes that "[s]tudents must become involved in the academic experience and level necessary to achieve academic and personal success" (p. 12). Tinto's (1987) model of student retention notes that one on the most reliable predictors of learning is student involvement or engagement. He goes on to say that an increased level of student involvement increases student success and retention:

> Such involvement can be accomplished only if institutions develop "learning communities" on campus. Such learning communities should be developed at all levels, including the college, program, and classroom levels. Successful learning communities may integrate students into the social and intellectual environment of the college campus. (Tinto, 1987, p. 188)

Research shows higher retention, greater student involvement, and more intellectual development for those studying in learning communities, yet most universities do not actively develop learning communities for nontraditional students (Morreale, 2004). Twenty-

seven percent of nontraditional students interrupted their enrollment in college, compared to 14% of traditional students (Choy & National Center for Education Statistics (ED), 2002). Universities must include nontraditional students in all aspects of university life in order to support retention

Student engagement is often regarded as synonymous with retention. Wesley (2006), argues that "[w]hen institutions use effective educational practices, they provide a small boost to students who are lower achieving when they start college. For those students, the more engaged they become, the better their grades are, and they start catching up to students who started with a higher level of achievement" (p. 1). Furthermore, Pascarella and Terenzini noted the following in a similar finding:

> Whatever form engagement might take... students should be helped early in their careers to find academic and social niches where they can feel they are a part of the institution's life, where friendships can be developed, and where role models (whether student or faculty) can be observed and emulated. (p. 654)

Spanier (2001) acknowledges that institutions of higher education have been successful in teaching, learning, and service. He advises institutions of higher education of the increased demands for accountability from public and community institutions due to the rapid changes in enrollment trends, demographics. Spanier acknowledges that "[c]onsequently, institutional leaders can be assured that they will be required to aggressively confront the challenge of engaging nontraditional students on their college campuses" (p. 6). Chaves (2003) discusses that nontraditional students and their retention should be at the forefront of every institutions strategic planning:

> This includes active engagement and involvement of nontraditional students enrolled in colleges today. This population of students should be immersed into the entire campus culture. Full immersion into the collegiate environment includes participation in orientation programs and continual receipt of ongoing academic assistance. Furthermore, it requires a commitment from institutional leaders to deliver to each student a campus experience that has a curriculum that connects the classroom learning objectives to real-world requirements, relevance, and skills. (p. 2)

With the emphasis being placed on increasing nontraditional student engagement to increase their retention, Wyatt (2011) explains what colleges should do to see the desired results:

> In order to encourage and facilitate nontraditional student engagement on college campuses requires a variety of approaches, individuals, and creativity, including (a) institutional commitment, (b) faculty experienced in the ways of learning and teaching nontraditional students, (c) staff who are understanding and treat nontraditional students with respect that their maturity deserves, (d) counselors who are trained in advising and working specifically with the special needs of nontraditional students, (e) curriculum programs that are flexible and take into consideration the multiple time constraints of nontraditional students, (f) programs and services that attract and appeal to the nontraditional student population across campus, (g) communication both on and off campus that is geared toward nontraditional students that includes nontraditional student marketing strategies, and (h) a campus environment that is both academically and aesthetically pleasing that encourages nontraditional students to remain on campus and become engaged in the collegiate environment. (Wyatt, 2011, p. 17)

It is important to continue to research retention of nontraditional students. Institutions of higher education can no longer ignore this population. Studies show that engagement positively affects retention, yet there are few institutions that cater campus engagement towards nontraditional students. Post-secondary institutions must align their curriculums and plan to meet the campus engagement needs of nontraditional students to assist in their retention.

Completion Rates

State government and outside funding agencies are calling for increased completion rates for institutions nationwide (N. B. Miller, 2014). Taniguchi and Kaufman (2005) discuss the increase of nontraditional students but go on to acknowledge that their low completion rates are concerning (as cited in Choy & National Center for Education Statistics (ED), 2002, p. 6-7). Choy and the National Center for Education Statistics assert that: "39 percent of all postsecondary students were 25 years or older in 1999, compared with 28 percent in 1970" (Taniguchi & Kaufman, 2005, p. 912). Choy and the National Center for Education Statistics (2002) acknowledge that only 31 percent of those nontraditional students enrolled in 1989-1990 earned their bachelor's degrees (p. 15). Additionally, research notes that part-time enrollment and lack of financial assistance widen the college attainment gap (Horn, 1996; Jacobs & King, 2002). Graduation of adult learners will benefit overall postsecondary completion goals, but their performance continues to be of concern.

Brock (2010) discusses statistics that indicate that student outcomes differ noticeably based on the type of institution they attend. He noticed that undergraduates who begin their studies at four-year colleges are twice as likely to graduate than those who begin at two-year institutions. Brock also found cultural differences in completion rates:

> At public two- and four-year institutions, Asian and Pacific Islanders have the highest persistence and completion rates of any racial or ethnic group, followed by non-Hispanic whites, Hispanics, and non-Hispanic blacks. (The longitudinal studies commissioned by the government lack sufficient numbers of American Indians and Alaska Natives on which to report.) Asian and Pacific Islanders who entered public four-year institutions in 1995–96 were nearly twice as likely to earn a degree or still be in school after six years as non-Hispanic blacks who entered the same year. The story by gender is a bit more complicated. At public four-year institutions, women have slightly higher persistence and completion rates than men (a difference of about 5 percentage points); at public two-year institutions, the gender difference is reversed. It is important to recall that because more women than men enroll in college, many more associate's and bachelor's degrees are awarded to women—a pattern that has held true at both two- and four-year institutions since at least the late 1980s. (Brock, 2010, p. 114)

Tinto (1987) acknowledges that students enter post-secondary institutions with variable skills, motivations, reasons and different commitment levels but argues that while we cannot control what happens to students before they enter the institution, what happens when they arrive is just as imperative to their success. One factor that can inhibit the success of nontraditional students is enrollment in remedial courses. Parsad and Lewis (2003) researched the most recent data from the Department of Education. They found that 42% of freshmen who enroll at community colleges must take at least one remedial course; furthermore 12-24% of freshman that attend four-year institutions must take remedial courses. Attewell, Lavin, Domina, and Levey (2006), conclude the following:

> Research and anecdotal evidence suggest that many students who are assigned to remedial education drop out of the classes (and often out of college) and that those who remain make slow progress. An analysis of data from the Department of Education's National Education Longitudinal Study shows that only 28% of remedial students in two-year colleges attain a degree or certificate within eight and one-half years of entry (compared with 43% of nonremedial students), and that 52% of remedial students in four-year colleges finish bachelor's degrees within this period (compared with 78% of students without remedial course work). The analysis also shows that remedial education delays time-to-degree for students in two-year colleges. Though seldom acknowledged, remedial education acts as a gatekeeper and quality control mechanism in most institutions. (p. 892)

Research has shown that increasing the completion rates of nontraditional students would benefit overall institution completion rates, but there is still a gap in achievement between traditional and nontraditional students. With numerous agencies and funding sources placing the spotlight on this population, there is still a lack of data to identify through competition metrics. This is compounded by the lack of federal reporting requirements that accurately report nontraditional student metrics (Brock, 2010). While this will undoubtedly change, nontraditional students are currently slipping through the cracks. Brock (2010) argues that with the increase in access to post-secondary institutions, student success in college as measured by degree attainment has not shown significant increases.

Nontraditional Students and For-Profit Colleges

For-profit colleges and universities are costly, supported almost entirely by government aid. These colleges target a disproportionate number of low-income and minority students

(Alderdice, 2015). During the 2008-2009 academic year, $32 billion dollars were used to operate for-profit colleges; however, more than half of the student enrolled in these institutions withdrew without a degree (Committee on Health , Education, Labor, and Pensions and United States Senate, 2012). Nonetheless, for-profit colleges are prevalent thanks to their abundant commercials and internet advertisements. Alderdice (2015) dicusses the target population of for-profit college:

> On the receiving end of these marketing efforts are the people that will make up the typical FPCU student body: working class, low-income, veteran, and minority students, especially those with incomes independent from their parents. African-American and Hispanic students make up nearly half of all students enrolled in FPCUs, compared to 28% of all undergraduates. Sixty-four percent of students in FPCUs have incomes below the median for all undergraduates. More than half of four-year students at for-profit colleges are financially independent from their parents, compared to seven percent of students at four-year public colleges. (p. 218-219)

These students are usually considered nontraditional students. For-profits lure in the population with false promises, convenient online classes, and nonexistent student services. Those students who are able to graduate from these institutions do not fare well in today's job market. Appel and Taylor (2015) note that a survey conducted by economist Rajeev Darolia suggests that there is not much difference in the kinds of jobs people from these two populations manage to secure. Appel and Taylor (2015) also acknowledge that these for-profit graduates often leave school with student loans and typically carry twice the debt load

of students from public colleges. Figure 2 compares the average tuition and fees at for-profit and public colleges.

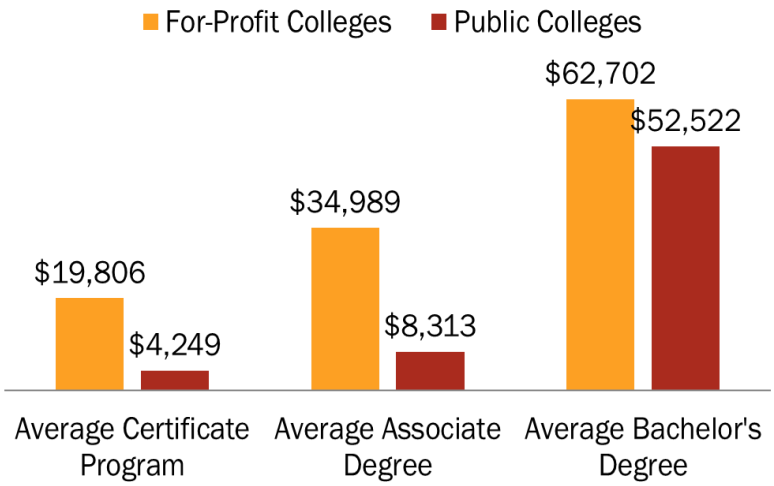

Figure 2: Average Tuition and Fees at For-Profit and Public Colleges

Veterans are also a nontraditional population that often fall victim to for-profit colleges. In August 2013, the Iraq and Afghanistan Veterans of America reported the following:

> Using high-pressure sales tactics and false promises, these institutions lure veterans into enrolling into expensive programs, drain their post-9/11 GI Bill education benefits, and sign up for tens of thousands of dollars in loans. The for-profits take in the money but leave the students with a substandard education, heavy student loan debt, non-transferable credits, worthless degrees, or no degrees at all. (p. 32-33)

President Obama commented on an instance in which a for-profit college preyed upon veterans with brain damage in the Committee on Health, Education, Labor, and Pensions and United States Senate report: “These Marines had injuries so severe some of them couldn’t recall what courses the recruiter had signed them up for” (p. 33). For-profit institutions seem

to target this vulnerable population without providing them with the support needed to be successful.

Barriers to Success

In his 2006 study, Clifford Adelman noted that there are two predictors of college completion. They are entering college immediately after finishing high school and taking a high school curriculum that stresses reading at grade level and math beyond basic algebra. He goes on to mention that higher socioeconomic status is also a predictor of college completion, although only moderately. These predictors are mostly found in traditional students thus making that group of students more likely to be successful. These predictors also foreshadow that nontraditional students enter college already behind their counterparts. All of the characteristics used to define nontraditional students are considered to be risk factors that are negatively correlated with persistence (Adelman, 2006).

Enrollment

Horn (1996) attributes a substantial part of nontraditional students' lower chance of completing their degrees within five years of enrollment to their overrepresentation in part-time enrollment. Students are usually considered to be part-time if they enroll for fewer than 12 semester credit hours. Once you consider the amount of time it would take to complete a degree plan only using part-time enrollment the task is daunting:

> Prolonged enrollment is easily interrupted by periods of absence from school and this can interfere with the continuity of students' learning. Part-time students may thus have a more difficult time progressing from basic to more advanced courses, and this disrupted progression can act as an obstacle to degree completion. In addition, these students often have only limited interactions with their instructors and fellow students

> outside classrooms, which can result in a more limited support system to help them when problems arise. (Taniguchi & Kaufman, 2005, p. 913)

In prior research, Tinto (1987) mentioned the importance of students being a part of the campus. Nontraditional students who are enrolled part time are less likely to take part in campus activities and reach out for help (Taniguchi & Kaufman, 2005).

Nontraditional students must also find ways to manage their time. Students' lack of time and prior obligations have led to an increase of nontraditional students enrolling in distance education programs. Compton and Schock (2000) stated that " [i]n response to tight schedules and the booming popularity of the Internet, schools throughout the United States are developing programs that allow non-traditional students to attend classes and even complete their degrees on-line" (Compton & Schock, 2000, p. 15). Previous research has demonstrated that nontraditional students are more likely to have time and location constraints that can cause conflict with their school work. These students have higher rates of degree non-completion and take longer to complete their degrees (Pontes & Pontes, 2012). Distance education programs and specifically for-profit programs are lacking in student support services. Many for-profit colleges fail to make the necessary investments in student support services that have been shown to help students succeed in school and afterwards, a deficiency that undoubtedly contributes to high withdrawal rates (Committee on Health , Education, Labor, and Pensions and United States Senate, 2012).

Attendance can also act as a barrier to the success of nontraditional students. Kowalski (1977) discussed absenteeism and its effect on enrollment status of nontraditional students. Absenteeism is defined as "[t]he extent to which students missed class and serves as an indicator of students reduced interaction with their college" (p. 59). Enrollment status can

be a barrier to the success of nontraditional students. Post-secondary institutions must be aware of the additional risk factors that nontraditional students have in comparison to traditional students and must provide support to assist with enrollment status obstacles.

Finances

According to the National Center for Education Statistics (2016) in the fall of 2014, there were 17.3 million undergraduate students and 2.9 million post baccalaureate students attending degree-granting postsecondary institutions in the United States. The United States Department of Education (2016), acknowledges the high costs of education:

> At four-year institutions, the average total cost of attendance for students living on campus was $22,750 at public institutions, $45,760 at private nonprofit institutions, and $30,410 at private for-profit institutions. At two-year institutions, the average total cost of attendance for students living on campus was $13,850 at public institutions, $29,700 at private nonprofit institutions, and $28,710 at private for-profit institutions. (U.S. Department of Education, 2016)

Of the undergraduate students at four-year institutions, 8.1 million (77%) attended full time. Of the undergraduate students at two-year institutions, 2.7 million (40 %) attended full-time and 4.1 million (60 %) attended part-time (U.S. Department of Education, 2016).

Each year students have the daunting task of trying to figure out how they will pay for school. According to the Condition on Education Report (2016), 85% of first-time, full-time undergraduate students at four-year degree-granting postsecondary institutions received financial aid. Hatfield (2003), finds that "[s]tudent financial aid is designed to assist all students in obtaining access to higher education regardless of age and economic circumstances. Although no specific aid types are designed to fit the needs of adult learners,

federal and state programs do not limit aid based on a student's age" (p. 30). There are different types of financial aid that nontraditional students use including loans, adult-focused programs, scholarships, employee tuition programs, tax relief, and withdrawals from retirement savings (Hatfield, 2003). Many students are not informed about their choices. Osborne argues that "[c]onsiderable uncertainty still exists amongst potential entrants in relation to the financial arrangements for Higher Education. A significant number of people need greater financial support" (Osborne et al., 2004, p. 312). Nontraditional students' deficiencies of knowledge about financial assistance are often compounded by institutional inability to be available to meet the needs of these students. Hatfield (2003), emphasizes the following:

> Several factors regarding student financial aid must be considered when providing service to adult learners. Institutions should continue to provide extended hours of financial aid services, increase the availability of interactive online services, and more fully communicate application procedures and other information to adult learners. Educators can assist their adult population by recognizing their needs, teaching others about their challenges, and supporting the financial aid community in their efforts to provide information and access to all students. (p. 33)

Gordon (2014) discusses nontraditional students' views towards required classes. Gordon notes that nontraditional students were aware of the financial burden additional classes that were not part of their major added in this study. The study had five themes: "1. negative perceptions of the Effective Learning/Student Success course changed, 2. perception that the traditional students did need the course, 3. financial burden, 4. changes to required enrollment for nontraditional students in the Effective Learning/Student Success course, and

5. transition perceptions" (Gordon, 2014, p. 167). The financial burden was not reported with traditional students, unlike with nontraditional students. Furthermore, nontraditional students often have other financial obligations to consider when enrolling in post-secondary education. Eaton (1991) discusses how the financial aid system was built with traditional students in mind and has not adjusted to the change in current enrollment trends:

> Nontraditional students face obstacles in financing their education, especially in the support service areas of child care and living costs. They pointed to congressional failure to find more fully grant support to part-time students. They focused on the limitations of contracted service programs, equally in the area of workforce retraining. They were not convinced by the argument offered by some that nontraditional students need less aid. Rather, they felt that the current aid system functions to discourage the nontraditional student, arguing that the definition of need, limited availability of assistance for part-time students, and primary emphasis on servicing the traditional student all work against the nontraditional student. (Eaton & American Council on Education, 1992, p. 4)

Part time enrollment also affects the financial support that can be received from federal and state programs. Students enrolled part-time are usually not eligible to apply for financial assistance programs such as scholarships, assistantship positions, tuition waivers, and student loans (Setftersten & Lovegreen, 1998). In a study about Pell Grants and student persistence, Dynarski (1999) argues that "[a]id increases persistence may suggest that front-loaded financial aid programs may improve student retention in the first years of college" (p. 8). Part-time students miss out on the financial benefits that full time students receive and

solving this problem should be at the forefront of nontraditional student success discussions. Studies show that financial aid affects academic achievement:

> First, financial aid may help increase educational outcomes for students because it lifts at least part of their financial burden, which allows them time to concentrate on their academic work. Second, financial aid has built-in incentives to encourage its recipients to maintain high grades and work toward the timely completion of their education. (p. 924)

Nontraditional students often struggle with obtaining the funds needed to attend school. Moreover, those who are enrolled part-time cannot receive the financial benefits traditional students can. It is imperative that student financial aid is adjusted so that nontraditional students are allowed to reap the benefits that traditional students do.

Campus Access and Other Barriers

Researchers examining nontraditional students have tried to locate the variable that will increase the achievement of this population and thus help to address the lack of skilled workers. Brock (2010) noted that a recent national survey that was conducted of college qualified students who choose not to enroll in college sheds light on the numerous barriers that nontraditional students must face. College costs, availability of aid, and uncertainty about the steps needed to enroll in college were significant deterrents. Brock (2010) argues the following:

> Some students may arrive at college knowing exactly what they need to do to accomplish their goals. Most, however, need guidance to figure out which courses to take and in what sequence, how to add or drop courses and apply for financial aid, and what resources are available to help them adjust to campus life. (p. 116)

Academic advisors play a crucial role in helping nontraditional students navigate the college terrain. Bettinger, Boatman, and Long (2013) argue that advisors have an effect on college student competition rates. Karp (2011) also noted the importance of advisors: "[c]ollege advisers can support students in multiple ways: prepare them for their courses, counsel them on how to improve study skills, or provide advice on how they can identify additional academic resources at their own colleges" (p. 22).

Brock (2010) researched the ratio of academic counselors to students on community college campuses. Brock found that the ratio of one counselor for one-thousand college students was very common. He also found that 32% of incoming freshman did not attend a freshman orientation program and half did not meet with or recall seeing an academic adviser during their first four weeks of college (Brock, 2010). Brock notes the following:

> The primary reason why student services are so meager in some institutions is lack of funding. One study finds a general pattern in the United States of increased stratification in higher education and reductions in funding per student outside of top-tier institutions affecting course availability, student-faculty ratios, and student services. The authors make a strong case that these reductions explain the increase in time-to-degree at less selective colleges and universities. In California, for example, community colleges receive less than half the funding per fulltime enrolled student that the state universities receive, and only about one-fifth as much as the University of California. In addition, California community colleges are limited by state law in the percentage of their budget that can be devoted to non-instructional activities, which further constrains their ability to provide adequate support services. (Brock, 2010, p. 119-120)

Student perceptions can also serve as a barrier to completion and retention. Osborne, Marks, and Turner (2004) researched nontraditional students and their perceptions of the current campus:

> Several people mentioned the desirability of institutions being more flexible in attendance requirements. At least one person in this category questioned whether she was prepared to sacrifice her current lifestyle with a reasonable salary, her own car, and a nice home in order to study. (p. 309)

Post-secondary faculty and staff must be aware of their student body. Nontraditional students often have other obligations and have a hard time fulfilling all of them. Time constraints are also often a barrier to nontraditional students. Their numerous roles outside of the classroom often rob their time. Osborne et al. (2004) noted that those nontraditional students who were currently working described themselves as time-poor. It was difficult to manage their time between work and studies, especially for those who had full-time jobs. The several hours of class time, assignments, and studying on top of work seemed unbearable (Osborne et al., 2004).

Governmental initiatives affect nontraditional students and their perceptions about entering post-secondary institutions. Osborne et al. (2004) researched the new Labor Government of 1997 that was adopted by the United Kingdom. The student looked at the effects of nontraditional students and their perceptions of the new initiative:

> Whilst the policy of the new Labor government of 1997 clearly provided a huge impetus for increasing and widening participation, the burden of supporting expansion was shifted substantially in the direction of the perceived principal beneficiary – the student. A common conception amongst interviewees was that the

> regulations in relation to the costs of HE and of the potential benefits and allowances that they might receive to offset costs was confusing, inconsistent and often unfair. Many believed that various government agencies could be more sensitive in formulating the regulations governing the receipt rather than being 'penalized' for wishing to upgrade their qualifications. (Osborne et al., 2004, p. 309)

Post- secondary institutional leaders must advocate for legislation that does not hinder nontraditional students' success. Leaders must also identify current laws that can deter students from enrolling. For institutions of higher education to increase nontraditional student completion rates, they must take a holistic approach.

Support Services for Nontraditional Students

Nontraditional students face numerous barriers that traditional students often do not. Mercer (1993) identified three types of barriers confronted by nontraditional students:

> situational, dispositional, and institutional. Situational constraints can include family circumstances, employment, and civic involvement. Dispositional barriers refer to intrapersonal attributes and are more difficult to define and measure. Some researchers believe adult students may have adjustment difficulties when they return to an educational setting. They may worry about not competing well with traditional age students, have perceptions of inadequate study skills, or have concerns about fitting in with younger students in class. Stress may be an outcome of dispositional barriers. Institutional barriers refer to aspects of the structure of educational organizations that may impede older students' attainment and fail to meet their needs. These barriers may include inconvenient class times and office hours, inadequate

> career planning for adults, and a lack of opportunities for campus involvement that accommodate interests and needs of nontraditional students. (p. 453)

Support services can assist nontraditional students as they try to navigate this new experience of collegiate life. These structures can increase the likelihood of retention and competition of this vast group of students.

Policy Implications and Initiatives

Federal and state initiatives can affect the enrollment and success of nontraditional students. Currently nontraditional students can apply for the same financial assistance that traditional students can:

> Currently, there are no federal student financial aid programs to fund baccalaureate and post-baccalaureate degrees designed specifically for adult learners. However, some states and institutions of higher education offer special programs for adult learners. Funding for child care is among the most common special financial aid programs for adult learners. In addition, funding is available under the Workforce Investment Act of 1998 for basic job preparation, skills development, and literacy programs. Students may inquire about specific financial aid for adults at their institution's financial aid office or contact their state's higher education agency. (Hatfield, 2003, p. 31)

Nontraditional students who prefer job readiness skills can receive funding to attend programs that lead to high wage/ high demand jobs from their local Workforce Investment Center. The Adult and Dislocated Worker Program, under Title I of the Workforce Investment Act of 1998, is designed to provide quality employment and training services to assist eligible individuals in finding and qualifying for meaningful employment, and to help

employers find the skilled workers they need to compete and succeed in business (*Title I-Workforce Development Activities*, 2014).

In the 1960s, the federal government began funding the TRIO programs that are designed to assist low-income, first generation college students, and students with disabilities, to progress from middle school to post-baccalaureate programs. Brock (2010) researched TRIO programs as they pertain to nontraditional students. He noted the following:

> The largest and best-known TRIO program, Upward Bound, is geared toward helping disadvantaged high school students prepare for college. A smaller and lesser-known program, Student Support Services, provides funds for basic skills instruction, tutoring, academic advising, financial aid and career counseling, transfer and graduate school counseling, and mentoring to disadvantaged students on college and university campuses. In 2003–04, the Student Support Services program awarded more than 936 grants to colleges and universities and reached more than 200,000 students nationwide, about half of whom were in community college. (p. 120)

The United States government has realized that funds are needed to assist students to become college graduates. While some programs are not specifically geared to nontraditional students, their services can assist with retention and competition.

Campus Support and Research

Campus support services are important to the success of nontraditional students. Astone, Schoen, Ensminger, and Rothert, (2010) referred to nontraditional college students' enrollment in post-secondary institutions as the American Way to attain higher education. Researchers are starting to examine the retention and completion of this increasing population. In a study about degree completion, Taniguchi and Kaufman (2005) noted that

among the 792 men and 911 women who enrolled as nontraditional students, 290 men and 338 women completed their degrees. Taniguchi and Kaufman gave suggestions to increase nontraditional students' success rates:

> Colleges that want to increase completion among nontraditional students should address concerns related to part-time status, academic preparedness, and childcare. Our findings may also have implications for employers who offer or are contemplating offering tuition reimbursement and flexible work schedules to employees attending college. (Taniguchi & Kaufman, 2005, p. 920)

Markle (2015) surveyed nontraditional students and asked them "What services could the university provide to help reduce your school-related stress?" Some suggestions included the following:

> Expand course offerings, improve student advising, and increase access to faculty members. Women wanted affordable on-campus child care, and men wanted more night courses. Many felt disadvantaged compared to traditional students and believed accommodations should be made. They proposed exemptions from attendance policies, course credit for work experience, specialized degree programs, and opportunities to "complete courses in their own time." Women in particular felt professors should be more receptive to their family-related needs. Men were more likely to request financial assistance such as reduced tuition, scholarships, or work-study programs. Several students expressed resentment over their perceived second-class treatment, and one recommended sensitivity training for professors. (Markle, 2015, p. 279)

Some institutions are taking into account Markle's (2015) findings. Florence-Darlington Technical College is a comprehensive two-year postsecondary public institution in eastern South Carolina. Muse, Teal and Williamson (1993) researched the policy changes to the college's admission standards:

> The new policy waived the SAT requirement for students who were over age 25 and who had successfully completed the three science courses with a grade of C or better without having to repeat one of these courses more than once. A general admission placement test was administered only to those students who had not had algebra or chemistry. (p. 45)

Muse, Teal and Williamson (1993) noted that Florence-Darlington Technical College saw an increase of success of their nontraditional students.

Brock (2010) examined studies in Louisiana and Canada that centered around performance based scholarships for nontraditional students:

> Both the Louisiana and the Canadian studies point to the promise of performance based scholarships in improving academic outcomes. The studies also suggest that researchers have more to learn about how best to design and implement such programs: which groups of students to target, what scholarship amount is optimal, and what role counselors should play, among other issues. (p. 124)

Studies by Brock (2010) and Muse, Teal and Williamson (1993) highlight possible initiatives to increase nontraditional student success.

Other countries are faced with the same inconsistencies that institutions face in the United States. The Universities of East London and Lancaster have incorporated independent study programs specifically intended for older students (Hayes, 1997). Universities in the

United Kingdom have answered the call by waiving normal entrance requirements for older students but there are no studies that prove that this increases degree completion (Bourner & Hamed, 1987; Brennan, 1986; Hayes, 1997; Molloy & Carroll, 1992). The Open University in the United Kingdom has accepted students without formal admission requirements since its inception (Hayes, 1997). Hayes noted that "[i]n order to respond to the demand for access to higher education from those older students who lack the necessary qualifications for admission, many British colleges of further education and some institutions of higher education have created so-called 'Access' courses" (Hayes, 1997, p. 2). Other colleges are providing additional education for their nontraditional students to increase success. Woodrow (1988) discuss the access courses that have been used in numerous countries. The courses are intended to provided subject specific knowledge and study skills to nontraditional students. Woodrow (1988) identified three key features of Access courses:

> (a) they are targeted towards groups traditionally underrepresented within higher education; (b) they are developed and delivered by a process of collaboration between the further education and higher education sectors; and (c) they offer clear progression to programmes of study within higher education. (Woodrow, 1988, p. 322)

While access courses were one of the first andragogy aligned attempts worldwide to assist nontraditional students, the growth in additional courses aligned for nontraditional student have become stagnate. Campus support can provide much needed assistance to the nontraditional student population. Many institutions worldwide are implementing different programs and support services to assist nontraditional students. There is research about adult learning theory that can contribute to nontraditional student success as well.

Nontraditional Student Support System and Role Conflict

Nontraditional students often wear many hats at home, work and school. Kasworm (2005) characterizes the perfect student as serious and committed. Additionally, Kasworm argues that "[t]his image is especially resonant among nontraditional women students who view returning to school as an opportunity to exercise their intellectual capabilities" (Kasworm, 2005). School, work, and family all require great heights of commitment. Researchers have studied interrole conflict among the domains of work, family, and school. Women experience high levels of conflict due to their internalization of the intensive mothering and ideal student roles (Christie, Lynn Tett, Cree, & Hounsell, 2008; Deutsch & Schmertz, 2011; Edwards, 1993; Marandet & Wainwright, 2010; Markle, 2015; Reay, Ball, & David, 2002; Stone & O'Shea, 2013). Markle (2015) examined the different types of role conflict nontraditional students can exhibit:

> Nontraditional students experience four types of interrole conflict: family school (family demands make it difficult to meet school demands), school-family (school demands make it difficult to meet family demands), work-school (work demands make it difficult to meet school demands), and school-work (school demands make it difficult to meet work demands). (p. 270)

In Markle's 2015 study, "[a]bout one third of the nontraditional students in this sample experienced moderate levels of interrole conflict, while 43% experienced high to very high levels. Nontraditional women students experience household and family responsibilities as overly burdensome, while men do not" (p. 274). For the women in this study, the performance of the student role was affected by their perception of difference as nontraditional students. Kasworm (2005) noted that women often felt excluded by traditional

students and patronized by faculty members: “Age had a double-edged impact on this sense of difference: These women did not want their age to affect how other students treated them, but they did want it to affect how professors treated them. They wanted professors to treat them as adults” (Markle 2015, p. 280). Despite their growing presence, nontraditional students have received only limited attention in educational attainment research. Markle’s 2015 study noted that “[w]omen participants with higher levels of work-school and school-family conflict were more likely to consider withdrawing, while those more satisfied with the university were less likely to consider doing so” (p. 277).

Nontraditional students often deal with role conflict. Depending on their life circumstances, these conflicts can result in withdrawing from school. Post-secondary institutions must be aware of the outside role conflicts to better assist this population.

Traditional Four-Year Colleges and Community Colleges

The National Center for Education Statistics noted that in the fall of 2014, the total undergraduate enrollment in degree-granting postsecondary institutions was 17.3 million students, constituting an increase of 31% from 2000 to 2014. The undergraduate enrollment decreased by four percent between 2010 and 2014. Undergraduate enrollment is projected to increase 14% from 17.3 million to 19.8 million students between 2014 and 2025 (*Undergraduate Enrollment*, 2016). There are 1,123 community colleges in the U.S. according to the American Association of Community Colleges and the National Center for Education Statistics states there were 2,870 four-year colleges as of the 2010-11 school year (as cited in Dunn 2016). Each year, students make the pivotal decision of which college to attend. The question of which post-secondary institute someone should attend is often debated. Students research the benefits and challenges of attending each institution.

Demographics

According to the Georgetown University Center on Education, Workforce Directors Anthony Carnevale and Jeff Strohl (as cited in Dunn, 2016), students who come from low socioeconomic statuses outrank those students of higher socioeconomic students by a ratio of 2:1 at community colleges. Higher socioeconomic students outrank low socioeconomic students at elite colleges at a ratio of 14:1. The College Board's distribution of the 2009-2010 fall undergraduate enrollment by school type was as follows: Public four-year: 44%, Private Nonprofit four-year: 19%, Public two-year: 26%, Private For-profit: 11%, and Other: <1%. (Sandy Baum, Little, & Payea, 2011).

Cost and Financial Aid

The Report of the Century Foundation Task Force on Preventing Community Colleges from Becoming Separate and Unequal researched the funding of higher education institutions. Research states that between 1999 and 2009 public research universities funding was 4,000 times that of community colleges (Sandy Baum et al., 2013). Dunn (2016) highlighted that the average tuition for community colleges was $3,347, while the average tuition of four-year colleges averaged $9,139. While community college and low income students have the greatest established financial need, fewer community college students complete the FAFSA than students at four-year universities. University tuition can be upward of $8,000, and the addition of living expenses and overall costs averages over $20,000 ("Community Colleges vs. Universities," 2016). Nationwide community colleges are more affordable than traditional four-year institutions.

Schools and the Outcome

Community colleges offer certifications, diplomas, and associate degrees. Traditional four-year institutions offer bachelor's degrees, master's degrees and doctorate degrees ("Differences Between Community Colleges and 4-Year Colleges," 2014). Students often make their decision to attend post-secondary institutions based on the education needed for their particular desired profession. Traditional four-year institutions are known to have a majority of "traditional aged" students (18-25), while community colleges serve age ranges from 16-65 and older. Research also notes that age plays a factor in what activities a college will host for their students ("Differences Between Community Colleges and 4-Year Colleges," 2014).

Across the board, community colleges are much more affordable than four-year institutions are. The average tuition at a community college is half that of the average tuition at a public university. Dunn (2016) notes that community colleges are stripped down and are able to offer more affordable tuition because they often lack the big campus infrastructures and extracurricular programs that increase the overhead at large universities. Research is another point of division. Traditional four-year intuitions often focus on research, unlike community colleges. The cost of original research is not a burden on community colleges or their faculty. Community college professors are required only to teach, without a research requirement. Community colleges have improved their academic standards over the last 15 to 20 years ("Community Colleges vs. Universities," 2016). With the increase in articulation agreements, the average community college curriculum is on par with the average university's and the classes can be just as challenging as those at traditional colleges. Research shows that students who transfer from community colleges to traditional colleges tend to outperform

their traditional university counterparts, although Dunn notes that while 81.4% of students who attend community colleges plan to earn at least a bachelor's degree, only 11.6% actually do so (Dunn, 2016). Brock (2010) discusses statistics that indicate that student outcomes differ noticeably based on the types of institutions they attend. Brock (2010) noted that undergraduates who begin their studies at four-year colleges are twice as likely to graduate as those who begin at two-year institutions.

Many community colleges depend on professional industries such as business and science and recruit career professionals who are actively engaged in their fields and offer unmatched real-world perspective. Traditional four-year universities typically do not have as much flexibility to do this. This flexibility can often cater to students who have jobs or families. Community colleges often have smaller class sizes than traditional colleges do. Smaller class sizes allow for rich classroom discussions and quicker feedback.

Most community colleges don't invest as much in campus facilities, athletic programs, or student clubs/organizations as traditional colleges do. That makes them more affordable, but many students feel the need to have "the college experience," which includes living in student dorms and participating in campus life. This is one area in which traditional four-year colleges attract more prospective students. The culture of traditional colleges is filled with fraternities and sororities, student government, and major specific organizations. Athletics can be found at both community colleges and traditional four-year colleges, although NCAA Division I competition can only be found at traditional colleges ("Community Colleges vs. Universities," 2016).

Chapter Summary

According to Pusser et al. (2007) the United States labor force includes 54 million adults without a college degree. Chen (2014) notes that traditional students age 18-24 are actually the minority of college students enrolled but are the focus of most higher education institutions in the United States. Chen notes that these institutions may not be prepared to most effectively meet the needs of nontraditional students (Chen, 2014).

Nontraditional students are students who delay enrollment; attend part time for at least part of the academic year; work full time (35 hours or more per week) while enrolled; are considered financially independent for purposes of determining eligibility for financial aid; have dependents other than a spouse; are single parents; or do not have a high school diploma (Horn, 1996, pp. 4-8). Nontraditional students often have different motivating factors when they choose to enroll or reenroll in post-secondary institutions. Regardless of the reason, often nontraditional students' post-secondary experiences differ from those of traditional students.

Nontraditional student enrollment now accounts for the majority of post-secondary students nationwide. Institutions around the world have not caught up with this growing trend. The current traditional student focus on education and environment may not attract or help nontraditional students succeed. Traditional students generally can direct most of their energy to their studies, whereas nontraditional students often have other responsibilities competing with school for their time, energy, and financial resources.

With performance now being tied to funding in many states and the continued growth of nontraditional student enrollment, a discussion nationwide has begun about how to help nontraditional students become college graduates. The Association of Public and Land-Grant

Universities and the American Association of State Colleges and Universities have vowed to increase college completion rates by 3.8 million students by 2025, a goal that focuses on nontraditional student success. Nontraditional student retention and competition rates are now being researched due to the push to increase graduates. Nontraditional students often enroll inadequately prepared, academically and psychologically, for college-level work (Howell, 2001). Many nontraditional students enroll in remedial classes and often drop out before completion (Young, 2002).

Nontraditional students face many barriers that traditional students do not. Enrollment affects nontraditional students' completion and retention rates. Horn (1996) attributes a substantial part of nontraditional students' lower chance of completing their degrees within five years of enrollment to their overrepresentation in part-time enrollment. Previous research also has demonstrated that nontraditional students are more likely to have time and location constraints that can cause conflict with their school work. School, work, and family all require great heights of commitment. Researchers have studied interrole conflict among the domains of work, family, and school. Women experience high levels of conflict due to their internalization of the intensive mothering and ideal student roles (Christie, Lynn Tett, Cree, & Hounsell, 2008; Deutsch & Schmertz, 2011; Edwards, 1993; Marandet & Wainwright, 2010; Markle, 2015; Reay, Ball, & David, 2002; Stone & O'Shea, 2013).

Nontraditional students also have financial stress to consider when enrolling in post-secondary institutions. There are different types of financial aid that nontraditional students use including loans, adult-focused programs, scholarships, employee tuition programs, tax relief, and withdrawals from retirement savings, but they are often not informed about their

choices. Nontraditional students often have other financial obligations to consider when enrolling in post-secondary education.

Studies about nontraditional students have tried to locate the variable that will increase the achievement of this population and thus contribute to the skilled workforce. Unfortunately, nontraditional students who enroll in post-secondary institutions often are met with campus barriers. Nontraditional students are often not included in the different aspects of college life. Tinto (1987) noted that this inclusion increases retention and completion. Academic advisors also play a crucial role in helping nontraditional students navigate the college terrain, but the ratio of advisors to students is too great.

Support services can assist nontraditional students as they try to navigate the collegiate experience. These structures can increase the likelihood of retention and competition of this vast group of students. Federal and state initiatives can affect the enrollment and success of nontraditional students as well. Currently, there are no federal student financial aid programs to fund baccalaureate and post-baccalaureate degrees designed specifically for adult learners. However, some states and institutions of higher education offer special programs for adult learners. While some programs are not specifically geared to nontraditional students, their services can assist with retention and competition.

Post-secondary institutions must understand the nontraditional student population. Understanding the population and the theories that pertain to their success, will support the increases of nontraditional student success. This growing population deserves to be researched as well as every chance to achieve success.

CHAPTER 3—METHODOLOGY AND PROCEDURES

Introduction

As described in Chapter 1, the purpose of this study was to explore the existing research about nontraditional college students, identify the factors that pose challenges to their retention and competition, and the factors that boost their success and to identify available services and initiatives offered to nontraditional students as well as to identify institutional attributes that contribute to the success of nontraditional college students. Using the theoretical constructs of the reviewed literature, this study researched the institutional factors that contribute to the success of nontraditional students. This chapter describes the methods and procedures that were used, including research design, sample population, data collection measures, data procedures, data analysis, and ethical considerations.

Research Design

The research questions presented in Chapter 1 correspond to the conceptual framework, which proposes that nontraditional student success, as measured by completion and retention, is affected by institutional barriers, institutional support structures, adult learning theory and student engagement theory. This study used quantitative methods to collect and analyze data to test the relationships and to confirm the conceptual framework. Quantitative methods were sufficient for this study because numerical data representing a population was collected through surveys. This method was chosen to provide perceptual and demographic data from a large population of nontraditional students regarding their experiences in their particular college. Data collected from surveys was aggregated and subjected to statistical analyses.

The online questionnaire included structured items that asked the participant to rate the degree that they agreed or disagreed with collegiate services and student campus

involvement. Responses from the questionnaires were analyzed using Statistical Package for Social Sciences 23.0 (SPSS). This data provided self-reported demographic, services, and involvement statistics for the sample. The data also provided the frequencies, means, and standard deviations of responses to the college services used and actively engaged are nontraditional students on college campuses. Descriptive statistics were used as a way of "organizing and summarizing" (Gall et al., 2007, p. 132) the numerical data from the questionnaire. The measures and analyses for this study are displayed in Table 1.

Sampling

The sample population for this study included two colleges located in southwest Louisiana: one school is a community college the other is a traditional four-year institution. All students from both institutions were sent the survey. The researcher used nontraditional student identifying markers to identify students of interest. Upon agreement from the Director of Institutional Research and the Vice Chancellor of Strategic Partnerships, students received an invitation to participate in the study via email. Table 2 represents the demographic characteristics of the colleges that will be utilized in the study.

Participants for the survey were selected using convenience sampling. Convenience sampling is often a preferred method. "The researcher selects a sample that suits the purposes of the study and that is convenient" (Gall et al., 2007, p. 175). College A had a spring population of 14,000 students (Bowie, 2016), while college B has a for-credit student population of 4,475 (C. Miller, 2017). A total of 18,475 students received the survey. Participants were recruited from an accessible sample of college students who attended school in a southern coastal state.

Table 1: Analyses for Research Questions

Research Questions	Original Measure	Statistical Analysis
Research Question 1:		
What are the college services used by nontraditional students in higher education?	Nontraditional Student Survey questions 23-25	Descriptive Statistics
Research Question 2:		
What services do nontraditional students express as desired, but not available in higher education institutions?	Nontraditional Student Survey questions 29-52	ANOVA
Research Question 3		
How actively engaged are nontraditional students on college campuses?	Nontraditional Student Survey questions 25-28	ANOVA
Research Question 4:		
To what extent do nontraditional students who attend traditional four year institutions differ in their desired support services from those nontraditional students who attend community colleges?	Nontraditional Student Survey questions 29-52	Independent T-test
Research Question 5:		
To what extent do nontraditional students who attend traditional four year institutions differ in the degree of campus	Nontraditional Student Survey - Fall 1997 questions 53-68	Independent T-test

involvement than those nontraditional students who attend community colleges?

Table 2: Colleges Participating in Study

College Type	four-year institution College A	Community College College B
Degrees offered	Doctorate Masters Bachelor Certification Continuing Education	Associate Technical Diploma Certification
Number of student who received the survey	14,000	4,475
Number of nontraditional students who completed the survey	703	296

The target population was nontraditional college students based on Horn's 1996 six categories: a student who delays enrollment (does not enter postsecondary education in the same calendar year that they complete high school); works full time (35hours or more per week) while enrolled; is considered financially independent for purposes of determining eligibility for financial aid; has dependents other than a spouse (usually children, but sometimes others), is a single parent (either not married or married but separated and has dependents), does not have a high school diploma (completed high school with a GED or other high school completion certificate or did not finish high school) (Horn, 1996, p. 4-8).

To increase the number of participants who met the criteria, all college students received the survey to avoid one group being singled out.

Data Collection and Procedures

Prior to collecting data, the University of Louisiana at Lafayette (UL Lafayette) Institutional Review Board was contacted to seek and obtain approval regarding the features and instrumentation of the study. The UL Lafayette Institutional Review Board also determined if this study met all the conditions of survey research involving human subjects, including whether or not full disclosure is needed, whether or not participation is voluntary, and whether or not the study data will remain confidential for exemption from institutional oversight.

Although the colleges participating in the study have numerous students, in order to reduce bias, a concerted effort was made to maximize the awareness of the importance of the study. Due to the importance of participant honesty, participants were given information about the significance of study in the consent form. The researcher worked with the Department of Institutional Research to create a plan to ensure high levels of participation of the students, which included an explanation of the study.

The directors of institutional research were contacted by email, to explain the purpose of the study and the potential benefits to the college. The email also detailed the logistics of the survey, such as who will be selected as participants and the research process, including the methods of data collection. Most importantly, the letter requested permission for all nontraditional students to participate in the study.

Participants in the study were able to access the instrument by using SurveyMonkey, an online program designed for survey research and critical analysis. The researcher chose

SurveyMonkey due the accessibility of distributing the survey and collecting data electronically ("Make Better Decisions with the World's #1 Survey Platform," 2016). Data was exported to IBM SPSS Statistics, a program that conducts statistical analyses ("IBM SPSS Statistics," 2016). Other benefits to using SurveyMonkey included being able to use an unlimited number of questions and responses, to generate and customize charts and graphs, and to randomize questions. SurveyMonkey also allowed the researcher to ensure anonymity of the participants by disabling the IP tracking devices. Furthermore, enabling the Secure Sockets Layer (SSL) encryption protectde collected data as a secure server transmits it ("Make Better Decisions with the World's #1 Survey Platform," 2016). At the end of the survey, the participants were allowed to withdraw from the study before submitting responses. The researcher attained written permission to use SurveyMonkey for the purpose of social science research from a Survey Monkey administrator.

Participants were assured of the anonymity of their choices and the security of the data collected on the landing page and at the original email they received. The participants were asked to complete the survey during a two-week period. Reminder emails were sent in order to encourage participation after the first week. The researcher refrained from conducting statistical analyses until all data have been received at the end of the two-week period.

All survey sets were examined individually as each set was entered into the SPSS master file. After all data were compiled, the data file was checked for errors by looking for values that fell outside the range of possible values for a variable. When errors were discovered, the entry was traced back to the original survey, and the SPSS file was corrected.

1595 students completed the survey; 999 of those student had at least one nontraditional student characteristic.

Data Instruments

The researcher utilized two preexisting surveys to administer to nontraditional students in order to address the research questions.

Nontraditional Student Survey

The first survey, *Nontraditional Student Survey*[1], was developed in Fall 1997. In a phone discussion with Robert Stubbs, the Director of Institutional Research at the University of Colorado Boulder, the purpose of this survey was clarified. The University of Colorado Boulder was interested in surveying nontraditional student's mid-semester to determine their experiences thus far in the term. The survey was conducted by the Office of Off - Campus Student Services with the goal of improving the undergraduate nontraditional student college experience. The target population included students age twenty-two and older. This survey was not formally validated but instead was used to evaluate the services and desires of this population (R. Stubbs, personal communication, October 10, 2016).

A Survey of Needs and Services for Postsecondary Nontraditional Students

The second survey is entitled *A Survey of Needs and Services for Postsecondary Nontraditional Students*[2]. In a conversation with Dr. Valjean Wright, Perkins Coordinator at Harcum College and creator of the survey, the purpose of this survey was clarified. Dr. Wright noted that the survey was created for use by practitioners, and the nature of the questions preclude any necessity for validity. Dr. Wright developed the survey as part of the

[1] Permission to include Nontraditional Student Survey was obtained from Robert Stubbs and is included as Appendix A.
[2] Permission to include A Survey of Needs and Services for Postsecondary Nontraditional Students was obtained from Dr. Valjean Wright and is included as Appendix A.

Perkins Career and Technical Education Grant, which addresses the issues of students who are nontraditional by gender. This grant strives to place students in programs where less than 25% of workforce is of their gender (V. Wright, personal communication, November 11, 2016). Table 3 identifies the questions, which survey each one came from, and the research that supports each one of these questions.

Table 3: Survey Questions and supporting research

Survey Question	Original Survey	Research
1. Consent		
2. What institution do you attend?	Researcher created	This question will allow the comparison between community college students and traditional four-year institutions.
3. What is your academic status?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Research shows that a substantial part of nontraditional students' have a lower chance of completing their degrees within five years of enrollment to their overrepresentation in part-time enrollment (Horn, 1996).
4. What is your gender identity?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Other variables typically used to characterize nontraditional students are associated with their background (race and gender) (Choy & National Center for Education Statistics (ED), 2002).

Survey Question	Original Survey	Research
5. Which racial or ethnic group(s) do you most identify?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Other variables typically used to characterize nontraditional students are associated with their background (race and gender) (Choy & National Center for Education Statistics (ED), 2002).
6. Have you attended a university before?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Only 31 percent of those nontraditional students enrolled in 1989-1990 earned their bachelor's degrees (Choy & National Center for Education Statistics (ED), 2002).
7. Have you served in the military?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Military veterans and personnel often have numerous nontraditional identifying markers (De La Garza, Manuel, Wood, & Harris III, 2016).
8. How long have you been enrolled in your particular program?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Undergraduates who are enrolled part-time take longer to graduate and are less likely to graduate (Taniguchi & Kaufman, 2005, p. 920).
9. What is your educational goal?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Undergraduates who begin their studies at four-year colleges are twice as likely to graduate as those who begin at two-year institutions (Brock, 2010).
10. When do you attend classes?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often attend part time or, take night courses or

		distance learning courses (Horn, 1996).
11. What are the reason(s) you chose to attend this college?	A Survey of Needs and Services for Postsecondary Nontraditional Students	The researcher would like to identify if institutional services played a role in the student attending the particular college.
12. When did you enroll in the college?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often delay enrollment (Horn, 1996).
13. Have you taken remedial courses?	Researcher created	Research and anecdotal evidence suggest that many students who are assigned to remedial education drop out of the classes (and often out of college) and that those who remain make slow progress (Attewell et al., 2006).
14. Do you work outside of school?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often works full time (35 hours or more per week) while enrolled (Horn, 1996).
15. What is your employment status?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often works full time (35 hours or more per week) while enrolled (Horn, 1996).
16. How many hours a week do you work?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often works full time (35 hours or more per week) while enrolled (Horn, 1996).
17. How old are you?	A Survey of Needs and Services for	

	Postsecondary Nontraditional Students	Nontraditional students are usually considered age twenty- five or older (Horn, 1996).
18. Are you financially independent?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students are considered financially independent for purposes of determining eligibility for financial aid (Horn, 1996).
19. Do you have dependents?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students usually have dependents other than a spouse (usually children, but sometimes others) (Horn, 1996).
20. Do you have children?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students usually have dependents other than a spouse (usually children, but sometimes others) (Horn, 1996).
21. How many children do you have?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students usually have dependents other than a spouse (usually children, but sometimes others) (Horn, 1996).
22. How old are your children?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students usually have dependents other than a spouse (usually children, but sometimes others) (Horn, 1996).
23. What are the challenges that you face in completing this program?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Previous research has demonstrated that nontraditional students are more likely to have time and location constraints that can cause conflict

		with their school work. These students have higher rates of degree non-completion and take longer to complete their degrees (Pontes & Pontes, 2012).
24. What is your current family status?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students can be single parents (either not married or married but separated and has dependents) (Horn, 1996).
25. What is your highest level of educational attainment?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students often do not have a traditional high school diploma (Horn, 1996).
26. What are your technology needs?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students have technology concerns and needs that are often not met at home (Markle, 2015).
27. What services have you used at your college?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Nontraditional students desire certain service from their college (Markle, 2015).
28. Have you had a conversation with a faculty member outside of class?	A Survey of Needs and Services for Postsecondary Nontraditional Students	It has been hypothesized that the more involved a student is, the more successful they will be in college (Pascarella & Terenzini, 1991).
29. Do you work regularly with a faculty member outside of class?	A Survey of Needs and Services for Postsecondary Nontraditional Students	It has been hypothesized that the more involved a student is, the more successful they will be in college (Pascarella & Terenzini, 1991).

30. Have you participated in study or discussion groups?	A Survey of Needs and Services for Postsecondary Nontraditional Students	It has been hypothesized that the more involved a student is, the more successful they will be in college (Pascarella & Terenzini, 1991).
31. Have you organized off-campus study opportunities?	A Survey of Needs and Services for Postsecondary Nontraditional Students	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
32. I would like my college to offer more summer and/ or evening classes.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
33. I would like my college to offer more online classes.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
34. I would like my college to offer smaller classes.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
35. I would like my college to offer more modern facilities.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
36. I would like my college to offer career counseling.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
37. I would like my college to offer extended hours for career counseling.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services

		from their college (Markle, 2015).
38. I would like my college to offer counseling services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
39. I would like my college to offer extended hours for counseling services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
40. I would like my college to offer extended hours for advising.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
41. I would like my college to offer extended office hours for professors and instructors.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
42. I would like my college to offer ability to video conference or phone conference with faculty and staff.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students desire certain services from their college (Markle, 2015).
43. I would like my college to offer face to face tutoring services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
44. I would like my college to offer extended hours for face to face counseling services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional

		students in the services their desire from their college (Markle, 2015).
45. I would like my college to offer online tutoring services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
46. I would like my college to offer student employment services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
47. I would like my college to offer extended library hours.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
48. I would like my college to offer library resources online.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
49. I would like my college to offer a computer lab on campus.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
50. I would like my college to offer extended hours for the on campus computer lab.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).

51. I would like my college to offer child care services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
52. I would like my college to offer more affordable child care on campus.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
53. I would like my college to offer financial aid services.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
54. I would like my college to offer lower tuition rates or more help with tuition needs through scholarships, aid, and/or work study.	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
55. I would like my college to offer Student Emergency Fund (bus passes, gas cards or small loan).	A Survey of Needs and Services for Postsecondary Nontraditional Students	Markle (2015) notes that nontraditional students differ from traditional students in the services their desire from their college (Markle, 2015).
56. Have you participated in informal social events with other students?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
57. How likely are you to seek advice on choosing courses?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).

58. How likely are you to get advice on careers?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
59. How likely are you to take an active part in what goes on in your classes?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
60. How likely are you to interact with instructors outside of class?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
61. How likely are you to develop friendships with others in your classes?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
62. How likely are you to get to know persons of different racial/ethnic backgrounds?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
63. How likely are you to get to know other non-traditional students?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
64. How likely are you to participate in social activities on campus?	Nontraditional Student Survey - Fall 1997	Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).
65. How likely are you to be involved in extracurricular activities	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success

(clubs, organizations, student government)?		(Pascarella & Terenzini, 1991).
66. How likely are you to use campus services and offices in evenings and/or on week-ends?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
67. How likely are you to participate campus events?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
68. How likely are you to find a place to study between classes?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
69. How likely are you to find a place to relax between classes?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
70. How likely are you to ask for financial assistance when needed?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).
71. How likely are you to ask for transportation assistance when needed?	Nontraditional Student Survey - Fall 1997	Student involvement can lead to academic success (Pascarella & Terenzini, 1991).

Data Analysis

Upon approval from the University of Louisiana at Lafayette Institutional Review Board and approval from the Director of Institutional Research from college A and the Vice chancellor of Strategic Partnerships of college B, the researcher provided an email link to the survey to each school's contact person. The contact person was supplied with an email template and the link to the survey. Participants received the survey which included consent.

The researcher was available by email to answer any questions regarding procedures. Students were allowed two weeks to complete the survey. A reminder email was sent to the student body at the end of the first week. Students were permitted to withdraw from the study up until the survey was submitted.

Both descriptive and inferential statistical analysis were used to analyze the data. Upon collection, data was analyzed using SPSS 23.0 ("IBM SPSS Statistics," 2016). A variety of quantitative analyses were conducted to examine the study measure, and to answer the primary research questions. Moreover, specific quantitative methods were used to test each research question presented in Table 1. These analyses include the following:

a. Descriptive statistics pertaining to characteristics of the sample, including all demographic information including, identify items of the instrument and normality assumptions.
b. An ANOVA was used to examine the independent variable, services nontraditional students desire to have on campus, on the dependent variable, nontraditional student campus engagement.
c. An ANOVA was used to examine to How actively engaged are nontraditional students on college campuses.
d. Independent t-test to compare the means of nontraditional students attending the four-year institution and the nontraditional community college students. The dependent variable will be the college type and the independent variables will be campus engagement and desired services of nontraditional students.

Descriptive Statistics

Descriptive statistics are valuable statistics used to summarize the data set (Gall, Gall, & Borg, 2007). A summary of descriptive statistics that was collected pertaining to characteristics of the sample, include: academic status, gender, racial or ethnic groups, military service, college in which they attend, educational goal, college services used, and the length of program enrollment was collected. Descriptive statistics was also used to identify items of the instrument including the mean, standard deviation, range, frequency analysis, the distributions shape and variation.

Descriptive statistics was used to answer research question one, what are the college services used by nontraditional students in higher education? In addition, descriptive statistics was used to identify if the student is minimally nontraditional, moderately nontraditional, or highly nontraditional. Horn's (1996) criteria will be used to categorized the students. Students are considered to be minimally nontraditional if they have only one nontraditional characteristic. Students are considered moderately nontraditional if they have two or three characteristics. Students are considered highly nontraditional if they have four or more characteristics. This provided the researcher with an accurate picture of the sample before generalizing results to larger populations. Furthermore, the researcher was able to find statistical differences within the population.

Analysis of Variance

Analysis of variance (ANOVA) is a hypothesis testing procedure used to analyze differences in group means among two or more groups (Gravetter & Wallnau, 2007). ANOVA compares the variance between each group to the variance within each group. This comparison results in a statistic called the F-ratio. The value of the F-ratio helps to determine

whether the difference between group means is greater than the difference one would expect due to chance. The variance within each group is considered to be the difference experienced among subjects due to chance or natural variation. An ANOVA was used instead of a chi square due to best practice for Likert scales. Research has found that it is possible to find true parameter values in factor analysis with Likert scale data, if assumptions about skewness, number of categories, were met (Lubke & Muthen, 2004). Likewise, researchers have found that F tests in ANOVA could return accurate p-values on Likert items (Glass, Peckham, & Sanders, 1972). Furthermore, items that have at least 5 points, that the underlying concept should be considered continuous (Carifio & Perla, 2007). ANOVA was used in this study to compare:

a. The services nontraditional students express as desired, but not available in higher education institutions and the level of nontraditional students.

b. How actively engaged on college campuses and the level of nontraditional students

Post hoc tests were also conducted. Post hoc tests are additional hypotheses tests run after the ANOVA to determine if the mean differences are significant are not. These tests compare the groups two at a time.

Independent T-Test

T-tests are an inferential statistical analysis that identifies if there is a statistically significant difference between the means in two unrelated groups (Ary, Jacobs, Razavieh, & Sorensen, 2006). This data analysis procedure is used to compare sample means to see if there is sufficient evidence to infer that the means of the population distribution differs. Independent t-test compares the means of two independent samples to determine if the mean of the two samples differ significantly. The samples are independent if they have no

relationship between them (Cronk, 2014). The assumptions of independent t-test are as follows:

a. Independent- The two groups being compared should be independent of each other.
b. Normal Distribution – The scores should be normally disturbed, but the t-test is robust enough to handle a violation of the normal distribution assumption. However, the samples should have the same variance.
c. The dependent variable must be interval or ratio scale.
d. The Independent variable should have only two discrete levels
e. Homogeneity of variances – Assumes that all groups have the same or similar variance (Cronk, 2014).

The researcher used an independent t-test to answer research question four; to what extent do nontraditional students who attend traditional four year institutions differ in their desired support services as those nontraditional students who attend community colleges and research question five; to what extent do nontraditional students who attend traditional four year institutions differ in the degree of campus involvement than those nontraditional students who attend community colleges? The researcher conducted Levene's Test for Equality of Variances to meet the homogeneity of variance assumption. The researcher also used the t-statistic, degrees of freedom and significance level to determine the difference. The researcher considered the response of nontraditional students who attend a four-year institution to nontraditional students who attend a community college. The two groups were independent of each other.

Procedures: Ethical Considerations

As stated before, prior to data collection, the UL Lafayette Institutional Review Board was contacted in order to seek approval of data collection methods involving human subjects. This study met the conditions of survey research with human subjects including full disclosure, voluntary, and confidential for exemption from institutional oversight. Due to the quantitative data collection techniques, all responses were anonymous. SurveyMonkey was set up in order to allow all responses to be anonymous, and users will be able to withdraw from the survey at any time before submitting responses. The researcher did not know the identity of anyone participating in the survey thus ensuring that there will be no repercussions for individuals within the college. Lastly, results were only disseminated to the respective colleges. Data has been reported in aggregated form.

The risk to the individual participant was considered minimal and included the time involved in completing the survey. Violation of confidentiality is a risk but is unlikely due to the anonymous nature of the collection process. No completed surveys were made available to anyone other than the researcher at any time.

Chapter Summary

Chapter Three presented an overview of the methodology for this study, including the research design and rationale, the sampling design and procedures and each measure. This chapter highlighted the data collection, processing procedures, and an overview of statistical the analyses that will address the research questions.

CHAPTER 4—RESULTS OF DATA ANALYSIS

Introduction

This chapter contains a summary of the results of the statistical analyses conducted in SPSS version 23 for five research questions pertaining to nontraditional student success. The analysis included descriptive statistics, analysis of variance (ANOVA), and T-tests for independent samples. The participants' backgrounds are described and the data screening procedures are summarized. The results and findings for each research question are presented in this chapter.

Summary of Descriptive Statistics

This section explains the descriptive statistics of the sample.

Demographics

The original sample included 1,595 college students from the two colleges. Students were considered nontraditional students based on their responses to seven survey questions. These questions were based on Horn's (1996) definition of nontraditional students.

> Delays enrollment (does not enter postsecondary education in the same calendar year that the graduate from high school); Works full time (35 hours or more per week) while enrolled; Is considered financially independent for purposes of determining eligibility for financial aid; Has dependents other than a spouse (usually children, but sometimes others); Is a single parent (either not married or married but separated and has dependents); or Does not have a high school diploma (completed high school with a GED or other high school completion certificate or did not finish high school). (p. 4-8)

Based on these responses, 596 students did not have any nontraditional characteristics and were excluded from the subsequent analysis. This left a sample of 999 nontraditional students. The frequency and percentages for the student demographics appear in Table 4.

The majority of students in the sample were women (68%, n=679) and Caucasian (68%, n=679); 49.4% (n=494) were 20-29 years of age. In terms of financial independence, 32.2% (n=323) reported having legal dependents other than a spouse and 58.3% (n=582) reported not having any dependents. Only 30.5% (n=305) had children. Of those with children, 34.9% (n=102) had one child, and 34.9% (n=102) had two children. The largest percentage of children were elementary school aged (13.3%, n=133). Only 8.2% (n=82) of the sample served in the military. Most students reported working outside of school (72.8%, n=727) and working part-time (56.6%, n=413); 38.3% (n=271) reported working 35 or more hours each week. The highest level of educational attainment for 65.5% (n=654) of the sample was a high school diploma.

Descriptive Analysis of Survey Questions Related to Students Educational Characteristics and Challenges

Table 5 shows the frequencies and percentages of the students' educational characteristics. A little less than half had attended a university before (49.8%, n=498). Most students attended College A (70.4%, n=703) and were enrolled in a program full-time (77.7%, n=776). The largest percentage of students had been enrolled in their particular program for two semesters (25.7%, n=257), had educational goals for a Bachelor's degree (74.6%, n=745), attended day classes only (57.8%, n=577), and chose to attend their particular college because of the convenient location (57.8%, n=577). Over 50% enrolled in college right after high school (52.4%, n=523). Only 40.8% (n=408) took remedial courses.

Table 4: Frequency and Percentages for Nontraditional Students' Demographic Characteristics

Variable	*N*	%
Gender Identity		
Female	679	68.0
Male	311	31.1
Transgender FTM (female-to-male)	1	.1
Non-binary/gender fluid	6	.6
Prefer not to say	2	.2
Total	999	100.0
Race/Ethnicity		
African-American (non-Hispanic)	217	21.7
Asian/Pacific Islanders	29	2.9
Caucasian (non-Hispanic)	679	68.0
Latino or Hispanic	36	3.6
Native American or Aleut	5	.5
Other	33	3.3
Total	999	100.0
Age		
19 or under	230	23.0
20-29	494	49.4
30-39	177	17.7
40+	98	9.8
Total	999	100.0
Financial Independence Factors (Check all that apply)		
Both my parents are deceased, I am a ward of the court	14	1.4
I am a veteran of the Armed Forces of the United States	59	5.9
I am a graduate or professional student	91	9.1
I am a married individual	213	21.3
I have legal dependents other than a spouse	323	32.3
I am an emancipated minor or in legal guardianship	174	17.4
I am a homeless youth	20	2.0
Other	300	30.0
Has Dependents		
Yes	417	41.7
No	582	58.3
Total	999	100.0
Has Children		
Yes	305	30.5

No	694	69.5
Total	999	100.0
Number of Children		
1	102	34.9
2	102	34.9
3	58	19.9
4 or more	30	10.3
Total	292	100.0
Age of Children (Check all that apply)		
Daycare age (newborn-2 years old)	91	9.1
Preschool age (3 - 4 years old)	69	6.9
Elementary school aged (5-10 years old)	133	13.3
Middle school aged (11-14 years old)	67	6.7
High School aged (14-18 years old)	67	6.7
Adults (18 years old or older)	78	7.8
Served in the Military		
Yes	82	8.2
No	917	91.8
Total	999	100.0
Work Outside of School		
Yes	727	72.8
No	272	27.2
Total	999	100.0
Employment Status		
Work full -time	285	39.0
Work part-time	413	56.6
Unemployed but looking for work not planning to work while i	20	2.7
Not planning to work while in school	12	1.6
Total	730	100.0
Hours Worked Each Week		
10-15 hours	130	18.4
15-20 hours	125	17.7
20-25 hours	99	14.0
25-30 hours	83	11.7
35 or more	271	38.3
Total	708	100.0
Highest Level of Educational Attainment		
High school graduate	654	65.5
GED or High school equivalency diploma	93	9.3
certificate of completion	63	6.3

hold a post-secondary degree	189	18.9
Total	999	100.0

Table 6 shows the frequencies and percentages of the challenges students face in completing their programs. The largest percentages of students reported the need to work while in school (64%, *n*=639) as a challenge, which was followed by financial problems (54.7%, *n*=546). The smallest percentages of students reported an inconvenient academic calendar (3.6%, *n*=36) as a challenge followed by inadequate reading, English, and math skills (5.2%, *n*=52).

Descriptive Statistics for the Number of Nontraditional Characteristics

The frequency and percentages for the number of nontraditional characteristics held by the students in the sample appear in Table 7. The number of nontraditional characteristics ranged from 1 to 7 with a mean of 2.62 (*SD*=1.74). The largest percentage of students had one nontraditional characteristic (36.6%, *n*=366). Students were classified into one of three groups based on the number of nontraditional characteristics they had: (a) minimally nontraditional (1 nontraditional trait); (b) moderately nontraditional (2-3 nontraditional traits); and (c) highly nontraditional (4 or more nontraditional traits). Based on this classification, 36.6% (*n*=366) were minimally nontraditional, 34.6% (*n*=346) were moderately nontraditional, and 28.7% (*n*=287) were highly nontraditional.

In 2010, the last year for which numbers are available, the U.S. Department of Education (2012) reported that almost nine million adults over the age of 25 were enrolled at degree-granting postsecondary institutions.

Table 5: Frequency and Percentages for Nontraditional Students' Educational Characteristics

Variable	*N*	%
Attended a University Before		
Yes	498	49.8
No	501	50.2
Total	999	100.0
Institution Attended		
College A	703	70.4
College B	296	29.6
Total	999	100.0
Student Academic Status		
Enrolled in a program part-time	223	22.3
Enrolled in program full-time	776	77.7
Total	999	100.0
Time Enrolled in Program		
One semester	164	16.4
Two semesters	257	25.7
Three semesters	121	12.1
Four semesters	152	15.2
Five semesters	89	8.9
Six semester	87	8.7
Seven semesters	26	2.6
Eight semesters	51	5.1
Longer than eight semesters	52	5.2
Total	999	100.0
Educational Goal		
Certificate	26	2.6
Technical diploma	6	.6
Associate's degree	126	12.6
Transfer to four-year school	96	9.6
Bachelor's Degree	745	74.6
Total	999	100.0
When do you attend classes		
Attend day classes only	577	57.8
Attend night classes only	37	3.7
Attend weekend classes	2	0.2
Attend online classes	86	8.6
Attend a mix of the above	297	29.7
Total	999	100.0

Reason(s) for Attending This College (Check all that Apply)		
Convenient location	577	57.8
Affordable tuition	533	53.4
The reputation of the school	355	35.5
Scholarship or loan opportunity	322	32.2
Job placement potential	171	17.1
Campus safety	148	14.8
Tired of being on a program waiting list at another school	21	2.1
Child care on campus	17	1.7
Other	138	13.8
When Did You Enroll in the College		
Enrolled in college right after high school	523	52.4
Attended another college right after high school and transferred	153	15.3
Delayed education for at least one year after high school	323	32.3
Total	999	100.0
Have You Taken Remedial Courses		
Yes	408	40.8
No	591	59.2
Total	999	100.0

These numbers are projected to increase to 9.8 million in 2015, and 10.6 million in 2020, representing approximately 43% of the total undergraduate student population (U.S. Department of Education, National Center for Educational Statistics, 2012, p. 286). This research had a nontraditional student population of 63% which is greater than the suggested amount.

National Postsecondary Student Aid Study (NPSAS) surveys conducted in 1986-87, 1989-90, and 1992-93. This study found that nontraditional students identified tended to be older than typical, independent, and to attend part time. In this research, nontraditional students tended to be younger than 29, work due to financial problems, and attend full time.

Choy and the National Center for Education Statistics (2002) acknowledge that only 31 percent of those nontraditional students enrolled in 1989-1990 earned their bachelor's degrees (p. 15). Additionally, research notes that part-time enrollment and lack of financial assistance widen the college attainment gap (Horn, 1996; Jacobs & King, 2002).While most students were enrolled full-time, over 600 students had been enrolled for four semesters or less.

Results Pertinent to the Research Questions

Research Question 1

Research Question 1 was: what are the college services used by nontraditional students in higher education? The research question was addressed via the descriptive analyses (frequencies and percentages) of the following survey questions: (a) Question 26 – *What are your technology needs?* And (b) Question 27- *What are the services you have used at your college?*

Table 6: Frequency and Percentages for Nontraditional Students' Educational Challenges

Variable	*N*	%
Challenges Students Face in Completing This Program (Check all that apply)		
The need to work while in school	639	64.0
Financial problems	546	54.7
Time constraints	526	52.7
Caring for a family while in school	292	29.2
Lack of confidence in my own abilities	268	26.8
The need for more study skills	265	26.5
The difficulty of the coursework	230	23.0
An inconvenient class schedule	167	16.7
Children (sickness, daycare)	154	15.4
Difficulty relating to my classmates	140	14.0
Lack of support from family and peers	130	13.0
Transportation to and from school	117	11.7
Not enough online courses	97	9.7
Inadequate reading, English and math skills	52	5.2
An inconvenient academic calendar	36	3.6

Other	82	8.2

Table 7: Frequency and Percentages for Number of Nontraditional Student Characteristics

Variable	*N*	%
Number of Nontraditional Characteristics		
1.00	366	36.6
2.00	235	23.5
3.00	111	11.1
4.00	99	9.9
5.00	97	9.7
6.00	66	6.6
7.00	25	2.5
Total	999	100.0
Amount of Nontraditional Traits (3 groups)		
Minimally nontraditional (1 characteristic)	366	36.6
Moderately nontraditional (2-3 characteristics)	346	34.6
Highly nontraditional (4 or more characteristics)	287	28.7
Total	999	100.0

The frequency and percentages for Question 26 and Question 27 appear in Table 8. The largest percentage of students indicated that they owned a laptop (68.1%, *n*=680), which was followed by the percentage that indicated they had computer access at home (25.3%, *n*=253).

Students reported using a variety of services at school. The largest percentages of students reported using the library (80.3%, *n*=802), computers or laptops on campus (69.1%, *n*=690), and financial aid services (67.4%, *n*=673). The smallest percentages of students reported using child care services (1.8%, *n*=18) and the Student Emergency Fund (3.4%, *n*=34). Six percent of students (*n*=60) reported using other services, which included the following: (a) academic Services, (b) advisor, (c) disability services, (d) financial aid

services, (e) food services, (f) health services, (g) scholarships, (h) transportation, and (i) VA benefits.

Research shows that support services are important to the success of college students. Moreover, studies about nontraditional students often critique advising and counseling services offered to nontraditional students by higher education institutions, as compared to those services offered by their traditional counterparts (Bauman et al., 2004). These findings support that nontraditional students use the campus support services of the library, computers and financial aid services.

Research Question 2

Research Question 2 was: What services do nontraditional students express as desired, but not available in higher education institutions? To address this research question, frequencies and percentages were used for Questions 32 to 36. The frequency and percentages for Questions 32-35 appear in Table 9. The largest percentage of students strongly agreed that they desired the following:

a. 44.9% (*n*=449) strongly agreed with *Offer additional summer classes*;
b. 38.9% (*n*=389) strongly agreed with *Offer additional online classes*;
c. 34.2% (*n*=342) strongly agreed with *Offer extended hours for advising*;
d. 29.5% (*n*=295) strongly agreed with *Offer career counseling*;
e. 28.2% (*n*=282) strongly agreed with *offer extended office hours for professors and instructors*.

Table 8: Frequency and Percentages for Question 26 & Question 27

Response	*N*	%
What are your technology needs?		
Have computer access at home	253	25.3
Own a laptop	680	68.1
Depend on the computers - computer lab at school	66	6.6
Total	999	100.0
What services have you used at your college?		
The library	802	80.3
Computers or laptops on campus	690	69.1
Financial aid services	673	67.4
Face-to-face tutoring services	257	25.7
Career services	237	23.7
Counseling services (student initiated)	135	13.5
Student employment services	130	13.0
Online tutoring services	66	6.6
Other	60	6.0
Student Emergency Fund (bus passes, gas cards or small loan)	34	3.4
Child care services	18	1.8

As seen in Table 10 above, the largest percentage of students strongly agreed that they desired the following services:

a. 75.1% (*n*=750) strongly agreed with *Offer lower tuition rates*;

b. Roughly 71% (*n*=713) strongly agreed with *Offer assistance with tuition needs through scholarships, aid and/or work study;*

c. 57.2% (*n*=571) strongly agreed with *Offer financial aid services*;

d. 45.1% (*n*=451) strongly agreed with *Offering extended library hours*;

e. 44.5% (*n*=445) strongly agreed with *Offer extended hours for the on-campus computer lab;*

f. 43.4% (*n*=434) strongly agreed with *Offer library resources online*;

g. 41.3% (*n*=413) strongly agreed with *Offer a computer lab on campus;*

h. 40.1% (*n*=401) strongly agreed with *Offer student employment services.*

Table 9: Frequency and Percentages for Question 32 – Question 35

Survey item	*N*	%
Offer additional evening classes		
Strongly Disagree	23	2.3
Disagree	84	8.4
Somewhat Disagree	80	8.0
Somewhat Agree	397	39.7
Agree	221	22.1
Strongly Agree	194	19.4
Total	999	100.0
Offer additional summer classes		
Strongly Disagree	9	.9
Disagree	31	3.1
Somewhat Disagree	23	2.3
Somewhat Agree	196	19.6
Agree	291	29.1
Strongly Agree	449	44.9
Total	999	100.0
Offer additional online classes		
Strongly Disagree	14	1.4
Disagree	39	3.9
Somewhat Disagree	47	4.7
Somewhat Agree	257	25.7
Agree	253	25.3
Strongly Agree	389	38.9
Total	999	100.0
Offer smaller class sizes		
Strongly Disagree	38	3.8
Disagree	110	11.0
Somewhat Disagree	134	13.4
Somewhat Agree	346	34.6
Agree	199	19.9
Strongly Agree	172	17.2
Total	999	100.0
Offer additional modern facilities		
Strongly Disagree	15	1.5
Disagree	47	4.7
Somewhat Disagree	67	6.7
Somewhat Agree	312	31.2

Agree	294	29.4
Strongly Agree	264	26.4
Total	999	100.0
Offer career counseling		
Strongly Disagree	7	.7
Disagree	19	1.9
Somewhat Disagree	31	3.1
Somewhat Agree	264	26.4
Agree	383	38.3
Strongly Agree	295	29.5
Total	999	100.0
Offer extended hours for career counseling		
Strongly Disagree	10	1.0
Disagree	41	4.1
Somewhat Disagree	74	7.4
Somewhat Agree	319	31.9
Agree	344	34.4
Strongly Agree	211	21.1
Total	999	100.0
Offer counseling services		
Strongly Disagree	10	1.0
Disagree	29	2.9
Somewhat Disagree	49	4.9
Somewhat Agree	305	30.5
Agree	358	35.8
Strongly Agree	248	24.8
Total	999	100.0
Offer extended hours for counseling services		
Strongly Disagree	13	1.3
Disagree	42	4.2
Somewhat Disagree	67	6.7
Somewhat Agree	344	34.4
Agree	313	31.3
Strongly Agree	220	22.0
Total	999	100.0
Offer extended hours for advising		
Strongly Disagree	5	.5
Disagree	38	3.8
Somewhat Disagree	42	4.2
Somewhat Agree	199	19.9
Agree	373	37.3

Strongly Agree	342	34.2
Total	999	100.0
Offer extended office hours for professors and instructors		
Strongly Disagree	14	1.4
Disagree	41	4.1
Somewhat Disagree	79	7.9
Somewhat Agree	289	28.9
Agree	294	29.4
Strongly Agree	282	28.2
Total	999	100.0
Offer the ability to video conference with faculty and staff		
Strongly Disagree	20	2.0
Disagree	90	9.0
Somewhat Disagree	125	12.5
Somewhat Agree	321	32.1
Agree	253	25.3
Strongly Agree	190	19.0
Total	999	100.0

The frequency and percentages for Question 36 appear in Table 11. Over 40% of students indicated that it was extremely likely they would *seek advice on choosing courses* (41.3%, *n*=413), *actively participate in your class* (49%, *n*=490), *get to know persons of different racial/ethnic backgrounds* (52.8%, *n*=527), *seek friendships with students with similar backgrounds* (43.3%, *n*=433), *find a place on campus to study between classes* (46.6%, *n*=466), *find a place on campus to relax between classes* (41.7%, *n*=417), and *ask for financial assistance when needed* (40.4%, *n*=404).

The second part of Research Question 2 was: Does the results differ among minimally nontraditional students, moderately nontraditional students, and highly nontraditional students? To address this question, the responses to Questions 32 to 36 were averaged to create a composite score. A composite was created for questions 32-36 (average

agreement with desired service) because they used a similar response scale (Strongly disagree to strongly agree). A separate composite score was created for Question 36 (average likelihood of using services and activities) because the survey items were measured with a scale that ranged from extremely unlikely to extremely likely.

Table 10: Frequency and Percentages for Question 32 – Question 35 continued

Survey item	*N*	%
Offer the ability to phone conference with faculty and staff		
Strongly Disagree	18	1.8
Disagree	76	7.6
Somewhat Disagree	131	13.1
Somewhat Agree	309	30.9
Agree	286	28.6
Strongly Agree	179	17.9
Total	999	100.0
Offer face-to-face tutoring services		
Strongly Disagree	6	.6
Disagree	26	2.6
Somewhat Disagree	66	6.6
Somewhat Agree	295	29.5
Agree	353	35.3
Strongly Agree	253	25.3
Total	999	100.0
Offer online tutoring services		
Strongly Disagree	9	.9
Disagree	29	2.9
Somewhat Disagree	47	4.7
Somewhat Agree	240	24.0
Agree	367	36.7
Strongly Agree	307	30.7
Total	999	100.0
Offer student employment services		
Strongly Disagree	7	.7
Disagree	12	1.2
Somewhat Disagree	19	1.9

Somewhat Agree	184	18.4
Agree	376	37.6
Strongly Agree	401	40.1
Total	999	100.0
Offer extended library hours		
Strongly Disagree	5	.5
Disagree	18	1.8
Somewhat Disagree	35	3.5
Somewhat Agree	175	17.5
Agree	315	31.5
Strongly Agree	451	45.1
Total	999	100.0
Offer library resources online		
Strongly Disagree	3	.3
Disagree	17	1.7
Somewhat Disagree	20	2.0
Somewhat Agree	185	18.5
Agree	340	34.0
Strongly Agree	434	43.4
Total	999	100.0
Offer a computer lab on campus		
Strongly Disagree	6	.6
Disagree	25	2.5
Somewhat Disagree	21	2.1
Somewhat Agree	205	20.5
Agree	329	32.9
Strongly Agree	413	41.3
Total	999	100.0
Offer extended hours for the on-campus computer lab		
Strongly Disagree	7	.7
Disagree	21	2.1
Somewhat Disagree	26	2.6
Somewhat Agree	188	18.8
Agree	312	31.2
Strongly Agree	445	44.5
Total	999	100.0

Offer child care services		
Strongly Disagree	23	2.3
Disagree	32	3.2
Somewhat Disagree	46	4.6
Somewhat Agree	308	30.8
Agree	287	28.7
Strongly Agree	303	30.3
Total	999	100.0
Offer more affordable child care on campus		
Strongly Disagree	24	2.4
Disagree	37	3.7
Somewhat Disagree	51	5.1
Somewhat Agree	296	29.6
Agree	269	26.9
Strongly Agree	322	32.2
Total	999	100.0
Offer financial aid services		
Strongly Disagree	7	.7
Disagree	10	1.0
Somewhat Disagree	13	1.3
Somewhat Agree	128	12.8
Agree	270	27.0
Strongly Agree	571	57.2
Total	999	100.0
Offer lower tuition rates		
Strongly Disagree	2	.2
Disagree	8	.8
Somewhat Disagree	13	1.3
Somewhat Agree	70	7.0
Agree	156	15.6
Strongly Agree	750	75.1
Total	999	100.0
Offer assistance with tuition needs through scholarships, aid and/or work study		
Strongly Disagree	4	.4

Disagree	5	.5
Somewhat Disagree	8	.8
Somewhat Agree	76	7.6
Agree	193	19.3
Strongly Agree	713	71.4
Total	999	100.0

Table 11: Frequency and Percentages for Question 36

Survey item	*N*	%
Seek advice on choosing courses		
Extremely Unlikely	18	1.8
Unlikely	44	4.4
Somewhat Unlikely	46	4.6
Somewhat Likely	161	16.1
Likely	317	31.7
Extremely Likely	413	41.3
Total	999	100.0
Seek advice on career choices		
Extremely Unlikely	39	3.9
Unlikely	66	6.6
Somewhat Unlikely	65	6.5
Somewhat Likely	190	19.0
Likely	281	28.1
Extremely Likely	358	35.8
Total	999	100.0
Actively participate in class		
Extremely Unlikely	5	.5
Unlikely	19	1.9
Somewhat Unlikely	35	3.5
Somewhat Likely	149	14.9
Likely	301	30.1
Extremely Likely	490	49.0
Total	999	100.0
Interact with your instructors outside of class		
Extremely Unlikely	16	1.6
Unlikely	80	8.0
Somewhat Unlikely	105	10.5
Somewhat Likely	256	25.6
Likely	269	26.9
Extremely Likely	273	27.3
Total	999	100.0

Get to know persons of different racial/ethnic backgrounds		
Extremely Unlikely	7	.7
Unlikely	8	.8
Somewhat Unlikely	25	2.5
Somewhat Likely	125	12.5
Likely	307	30.7
Extremely Likely	527	52.8
Total	999	100.0
Seek friendships with students with similar backgrounds		
Extremely Unlikely	11	1.1
Unlikely	21	2.1
Somewhat Unlikely	45	4.5
Somewhat Likely	145	14.5
Likely	344	34.4
Extremely Likely	433	43.3
Total	999	100.0
Participate in social activities on campus		
Extremely Unlikely	73	7.3
Unlikely	108	10.8
Somewhat Unlikely	148	14.8
Somewhat Likely	244	24.4
Likely	181	18.1
Extremely Likely	245	24.5
Total	999	100.0
Be involved in extracurricular activities (clubs, organizations, student governments)		
Extremely Unlikely	85	8.5
Unlikely	98	9.8
Somewhat Unlikely	140	14.0
Somewhat Likely	201	20.1
Likely	208	20.8
Extremely Likely	267	26.7
Total	999	100.0
Use campus services in the evening		
Extremely Unlikely	69	6.9
Unlikely	93	9.3
Somewhat Unlikely	106	10.6
Somewhat Likely	214	21.4
Likely	237	23.7
Extremely Likely	280	28.0
Total	999	100.0

Use campus services on the weekend		
Extremely Unlikely	99	9.9
Unlikely	126	12.6
Somewhat Unlikely	130	13.0
Somewhat Likely	189	18.9
Likely	187	18.7
Extremely Likely	268	26.8
Total	999	100.0
Participate in campus events		
Extremely Unlikely	79	7.9
Unlikely	117	11.7
Somewhat Unlikely	126	12.6
Somewhat Likely	253	25.3
Likely	218	21.8
Extremely Likely	206	20.6
Total	999	100.0
Find a place on campus to study between classes		
Extremely Unlikely	40	4.0
Unlikely	44	4.4
Somewhat Unlikely	45	4.5
Somewhat Likely	133	13.3
Likely	271	27.1
Extremely Likely	466	46.6
Total	999	100.0
Find a place off campus to study between classes		
Extremely Unlikely	69	6.9
Unlikely	101	10.1
Somewhat Unlikely	111	11.1
Somewhat Likely	158	15.8
Likely	239	23.9
Extremely Likely	321	32.1
Total	999	100.0
Find a place on campus to relax between classes		
Extremely Unlikely	53	5.3
Unlikely	55	5.5
Somewhat Unlikely	66	6.6
Somewhat Likely	120	12.0
Likely	288	28.8
Extremely Likely	417	41.7
Total	999	100.0
Find a place off campus to relax between classes		
Extremely Unlikely	89	8.9

Unlikely	111	11.1
Somewhat Unlikely	123	12.3
Somewhat Likely	134	13.4
Likely	228	22.8
Extremely Likely	314	31.4
Total	999	100.0
Ask for financial assistance when needed		
Extremely Unlikely	35	3.5
Unlikely	48	4.8
Somewhat Unlikely	72	7.2
Somewhat Likely	177	17.7
Likely	263	26.3
Extremely Likely	404	40.4
Total	999	100.0
Ask for transportation assistance when needed		
Extremely Unlikely	87	8.7
Unlikely	90	9.0
Somewhat Unlikely	117	11.7
Somewhat Likely	209	20.9
Likely	228	22.8
Extremely Likely	268	26.8
Total	999	100.0

Table 12: Descriptive Statistics for the Agreement with Needing Services (Question 32- Question 35) and Likelihood of Using Services and Activities (Question 36) (N=989)

Variable	Min	Max	*M*	*SD*	Kurtosis	Skewness
Agreement with desired services (Question 32- Question 35)	2.72	6.00	4.86	0.56	.70	-0.54
Likelihood of using services and activities (Question 36)	1.65	6.00	4.58	0.86	.21	-0.52

Note. S.E. for Kurtosis was .15, S.E. for Skewness was .07

To check for univariate outliers, the variables were transformed into standardized scores. Cases whose standardized values were above the absolute value of 3.29 were deemed to be univariate outliers (Tabachnick & Fidell, 2007). Eight cases in the composite for average agreement with needing services had the following standardized scores: -5.62, -5.03,

4.77, -4.05, -3.72, -3.72, -3.66, -3.66 (id=1 to 8). Two cases in the composite for average likelihood of using services and activities (Question 36) had the following standardized scores: 3.70 (id=268) and -3.50 (id=36). These 10 cases were deleted from the data set prior to further analysis, which reduced the sample size to 989.

Table 12 shows the descriptive statistics for the two composite variables. The mean score for composite for average agreement with needing services was 4.86 (*SD*=0.56) and ranged from 2.72 to 6.00. The mean score for average likelihood of using services and activities was 4.58 (*SD*=0.86) and ranged from 2.65 to 6.00.

Univariate normality was assessed via the skewness and kurtosis indices (i.e., skewness or kurtosis statistic/standard error) of the variables. According to Kline (2011), a variable is not normally distributed if its skewness index is above three and if its kurtosis index is between 10 and 20 (Kline, 2011). As shown in Table 12, no variable displayed such properties; thus, it can be concluded that the assumption of univariate normality is fulfilled.

Two analysis of variance (ANOVA) models were used to determine if there were mean differences in the averages for desired services and likelihood of using services and activities by type of student (minimally nontraditional students, moderately nontraditional students, and highly nontraditional students). Chi-square was not appropriate for this analysis given that the dependent variables were continuous variables. The assumptions of normality and no outliers were met (10 outliers were removed). The assumption for homogeneity of variance was assessed with Levene's test as part of each ANOVA and is described below.

The first ANOVA was used to determine if there were statistically significant differences in agreement with desired services by type of student (minimally nontraditional students, moderately nontraditional students, and highly nontraditional students). Levene's test was used to determine homogeneity of variance and the null hypothesis that the

population variances are equal. A Levene's *p* value that is less than .05 indicates homogeneity of variances has not been achieved. Levene's test of equality of error variances for agreement with desired services was not statistically significant ($F(2, 986)=1.26$, $p=.28$), indicating this assumption of equality of variance was not violated. Table 13 shows the descriptive statistics for agreement with desired services by type of student. As seen in Table 14, there was no statistically significant difference in average agreement with desired services by type of student, $F(2, 986)=0.45$, $p=.63$. The mean score for each student group is plotted in Figure 3.

Table 13: Descriptive Statistics for Agreement with Desired Services by Type of Student

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Minimally nontraditional (1 characteristic)	365	4.86	0.53	.02	4.81	4.92	2.80	6.00
Moderately nontraditional (2-3 characteristics)	343	4.87	0.59	.03	4.81	4.93	2.72	6.00
Highly nontraditional (4 or more characteristics)	281	4.83	0.56	.03	4.76	4.90	2.96	6.00
Total	989	4.86	0.56	.01	4.828	4.89	2.72	6.00

Table 14: Results of the ANOVA for Agreement with Desired Services by Type of Student

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	.292	2	.146	.458	.633
Within Groups	314.525	986	.319		
Total	314.817	988			

The next ANOVA was used to determine if there were statistically significant differences in likelihood of using services and activities by type of student (minimally nontraditional students, moderately nontraditional students, and highly nontraditional students). Levene's test of equality of error variances for average likelihood of using services

and activities was statistically significant ($F(2, 986)=10.01$, $p=.001$), indicating the equal variance assumption was violated. Levene's test is not necessarily very robust itself against violations of the homogeneity of variances assumption; Glass and Hopkins (1996) refer to

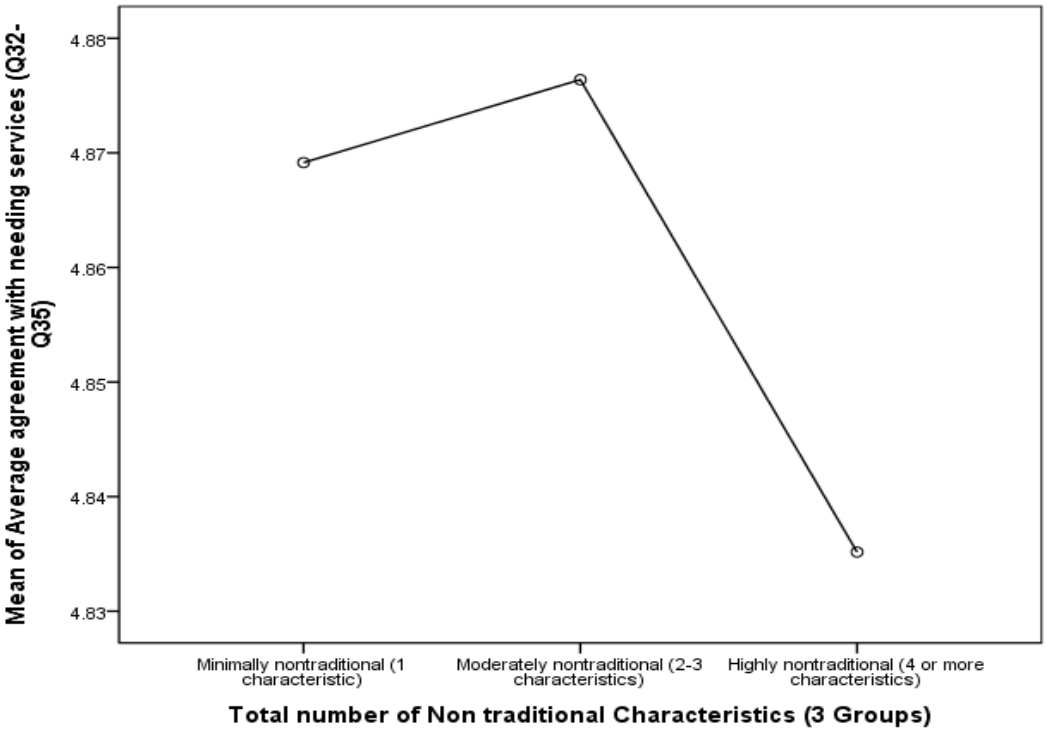

Figure 3. Plotted means for average agreement with needing services by type of student.

Levene's test as "fatally flawed" (p. 436). In addition, in the case of unequal sample sizes per group, Levene's test is itself not very robust (Glass & Hopkins, 1996). However, give the violation, the Welch test was also calculated as part of the ANOVA. Table 15 shows the descriptive statistics for likelihood of using services and activities by type of student. As seen in Table 16, there was a statistically significant difference in average likelihood of using services and activities by type of student, $F(2, 986)=24.04$, $p=.001$. In addition, the Welch statistic test was statistically significant, Welch $(2, 611.70)=20.79$, $p=.001$.

Given the violation of equal variance assumption, the Games-Howell post hoc test was used to identify the specific statistically significant differences between the three groups

of students. The post hoc test indicated that the minimally nontraditional students (*M*=4.72, *SD*=0.72) had significantly higher average likelihood of using services and activities scores than highly nontraditional students (*M*=4.29, *SD*=0.96). In addition, the moderately

Table 15: Descriptive Statistics for Likelihood of Using Services and Activities by Type of Student

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Minimally nontraditional (1 characteristic)	365	4.72	0.72	.03	4.65	4.80	2.00	6.00
Moderately nontraditional (2-3 characteristics)	343	4.67	0.85	.04	4.58	4.76	1.65	6.00
Highly nontraditional (4 or more characteristics)	281	4.29	0.96	.05	4.17	4.40	1.71	6.00
Total	989	4.58	0.86	.02	4.53	4.63	1.65	6.00

Table 16: Results of the ANOVA for Likelihood of Using Services and Activities by Type of Student

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	34.298	2	17.14	24.04	.001
Within Groups	703.29	986	0.71		
Total	737.59	988			

nontraditional students (*M*=4.67, *SD*=0.85) had significantly higher average likelihood of using services and activities scores than highly nontraditional students did (*M*=4.29, *SD*=0.96). The mean score for each student group is plotted in Figure 4.

Most of the research about nontraditional students highlights the benefits of student support services. While most colleges offer support services, many do not evaluate these services to determine if students desire the services provided. The findings note that nontraditional students desire additional summer classes, online classes, extended library and

advising hours, career counseling, assistance with tuition and financial aid, and employment services. Nontraditional students also expressed that they would likely seek advice when choosing courses, participate in class, and get to know and build friendships with students of different backgrounds. While pervious research did not identify if traditional students differ in service desire or likelihood to use services, these findings show that there was no statistical difference between the populations.

Research Question 3

Research Question 3 was: How actively engaged are nontraditional students on college campuses? Questions 28-31 were analyzed with frequencies and percentages to answer the research questions. In addition, an ANOVA was used to examine the association

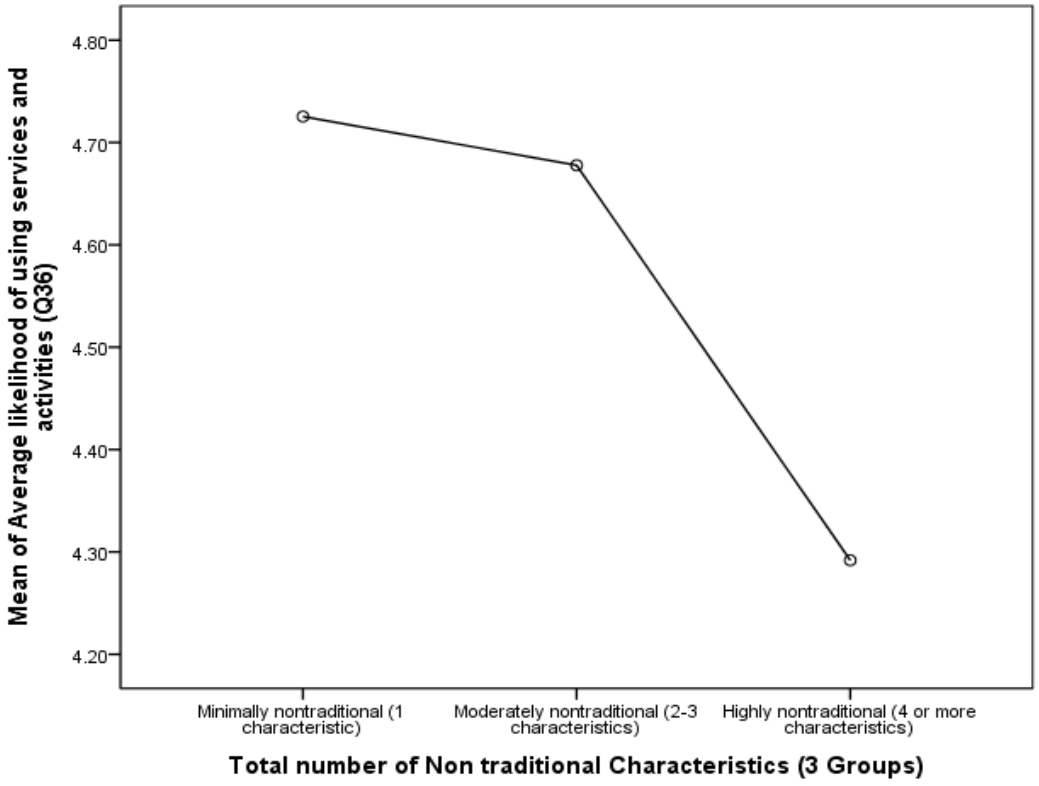

Figure 4. Plotted means for average agreement with needing services by type of student.

between the responses and type of student (minimally nontraditional students, moderately nontraditional students, and highly nontraditional students) and to address the question: Does the results differ between minimally nontraditional student, moderately nontraditional students and highly nontraditional students?

The frequency and percentages for Questions 28-31 appear in Table 17. A total of 68.7% (*n*=686) of students reported having a conversation with a faculty member outside of class and 85.5% (*n*=854) reported working regularly with a faculty member outside of class. Only 45.3% (*n*=453) reported participating in study group or discussion groups and 32.4% (*n*=324) reported organizing off-campus study opportunities.

An ANOVA was used to determine if there were mean differences in the degree of campus involvement by type of student (minimally nontraditional students, moderately

Table 17: *Frequency and Percentages for Questions 28-31*

Survey item	*N*	%
Have you had a conversation with a faculty member outside of class?		
Yes	686	68.7
No	313	31.3
Total	999	100.0
Do you work regularly with a faculty member outside of class?		
Yes	145	14.5
No	854	85.5
Total	999	100.0
Have you participated in study group or discussion groups?		
Yes	546	54.7
No	453	45.3
Total	999	100.0
Have you organized any off-campus study opportunities?		
Yes	324	32.4

No	675	67.6
Total	999	100.0

nontraditional students, and highly nontraditional students). Chi-square was not appropriate for this analysis given that the dependent variable was continuous. The assumptions of normality and no outliers were met. The assumption for homogeneity of variance was assessed with Levene's test as part of the ANOVA and is described below.

Levene's test was used to determine homogeneity of variance and the null hypothesis that the population variances are equal. A Levene's *p* value that is less than .05 indicates homogeneity of variances has not been achieved. Levene's test of equality of error variances for average campus involvement was not statistically significant ($F(2, 986)=1.53$, $p=.85$), indicating this assumption of equality of variance was met.

Table 18 shows the descriptive statistics for average campus involvement by type of student. As seen in Table 19, there was a statistically significant difference in average campus involvement by type of student, $F(2, 996)=12.56$, $p=.00$. Tukey post hoc tests were used to determine where the differences were between the three groups. The minimally nontraditional students had significantly higher average campus involvement scores ($M=1.93$, $SD=1.18$) than either moderately traditional students did ($M=1.65$, $SD=1.17$) or highly nontraditional students did ($M=1.70$, $SD=1.19$). The mean score for each student group is plotted in Figure 5.

Numerous studies suggest that there is a positive relationship between student engagement and academic success (Heng, 2014). Most of these studies research the traditional student population and do not take nontraditional students into account. These findings report that nontraditional students are actively engaged on college campuses

contrary to previous research. Nontraditional college students who attend traditional four-year colleges are more actively engaged than those who attend community colleges which could be due to more activities being available at traditional four-year colleges.

Table 18: Descriptive Statistics for Average Campus Involvement by Type of Student

Group	*N*	*M*	*SD*	*SE*	95% CI Lower	95% CI Upper	Min	Max
Minimally nontraditional (1 characteristic)	366	1.93	1.18	.06	1.80	2.05	0	4.00
Moderately nontraditional (2-3 characteristics)	346	1.65	1.17	.06	1.52	1.77	0	4.00
Highly nontraditional (4 or more characteristics)	287	1.47	1.18	.06	1.33	1.61	0	4.00
Total	999	1.70	1.19	.01	1.62	1.77	0	4.00

Table 19: Results of the ANOVA for Average Campus Involvement by Type of Student

	Sum of Squares	*df*	Mean Square	*F*	*p*
Between Groups	35.171	2	17.586	12.569	.000
Within Groups	1393.531	996	1.399		
Total	1428.703	998			

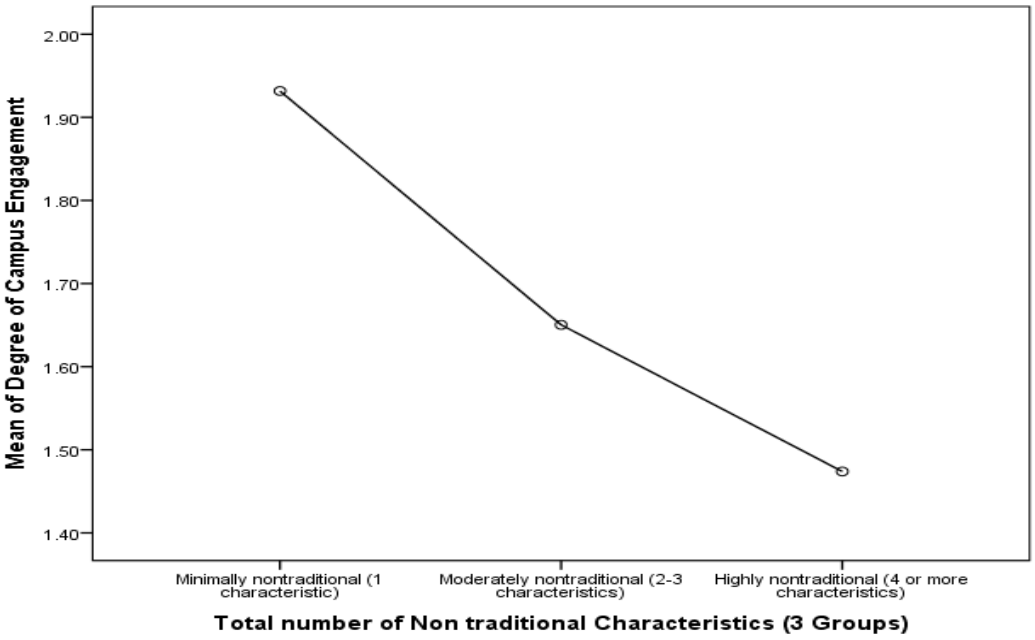

Figure 5. Plotted means for average campus involvement by type of student.

Research Question 4

Research Question 4 was: To what extent do nontraditional students who attend traditional four year institutions differ in their desired support services from those nontraditional students who attend community college? *T*-tests for independent samples were used to assess this research question and to determine if there were statistically significant differences in the two composite variables (average agreement with needing service and average likelihood of using services and activities) by type of school. As previously mentioned, 10 outliers were removed for these two composite variables so the sample size for this analysis was 989.

Levene's test of equality of error variances for average agreement with needing services was not statistically significant ($F(2, 987)=0.49$, $p=.48$), indicating this assumption was not violated. Similarly, Levene's test of equality of error variances for average

likelihood of using services and activities was not statistically significant ($F(2, 987)=0.60$, $p=.43$, indicating this assumption was not violated.

As seen in Table 20, students in the four-year college had an average agreement with desired services score of 4.85 ($SD=0.55$,) and students in the community college had an average agreement with desired services score of 4.88 ($SD=0.58$). The average scores for the two groups were similar and did not differ significantly ($t(987)=-.52$, $p > .05$).

As seen in Table 20, students in the four-year college had an average likelihood of using services and activities score of 4.57 ($SD=0.86$) and students attending the community college had an average likelihood of using services and activities score of 4.60 ($SD=0.87$). The average scores for the two groups were similar and did not differ significantly ($t(987)=-.60$, $p > .05$).

Numerous studies suggest that there is a positive relationship between student engagement and academic success (Heng, 2014). Most of the research focuses on traditional student populations and does not take nontraditional students into account. These studies also do not account for the differences in the types of college attended. The findings noted that there was no statistical difference in desired support services nor likelihood of using services between nontraditional students who attend traditional four-year colleges and community colleges.

Table 20: *T-Test for Independent Samples Comparing Agreement with Desired Services and Likelihood of Using Services and Activities by Type of School*

Variable	What institution do you attend?	*N*	*M*	*SD*	*t*	*p*
Average Agreement with Desired Services	four-year College	696	4.85	0.55	-.52	.40
	Community College	293	4.88	0.58		

Average Likelihood of Using Services and Activities	four-year College	696	4.57	0.86	-.60	.70
	Community College	293	4.60	0.87		

Research Question 5

Research Question 5 was: To what extent do nontraditional students who attend traditional four year institutions differ in the degree of campus involvement than those nontraditional students who attend community colleges? *T*-tests for independent samples were used to assess this research question and to determine if there were statistically significant differences in average degree of campus involvement by type of school. As previously mentioned, there were no outliers removed for these composite variables so the sample size for this analysis was 999.

Levene's test of equality of error variances for average campus involvement was not statistically significant ($F(2, 997)=0.21$, $p=.61$), indicating this assumption was not violated. As seen in Table 21, students in the four-year college had an average campus involvement score of 1.90 ($SD=1.16$), and students in the community college had an average campus involvement score of 1.22 ($SD=1.13$). The mean difference between the average campus involvement scores was 0.67 ($CI=0.51$ to 0.82), and this difference was statistically significant ($t(987)=.8.38$, $p=.001$). Students attending the four-year college had a greater degree of campus involvement than students attending the community college.

Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991). Most of the research considers traditional student populations does not consider nontraditional students. These studies also do not account for the differences in the types of college attended. The findings noted that there was a statistical

difference in campus involvement of nontraditional students who attend traditional four-year colleges and community colleges.

Table 21: *T-Test for Independent Samples Comparing Degree of Campus Involvement by Type of School*

Variable	What institution do you attend?	*N*	*M*	*SD*	*t*	*p*
Degree of Campus Involvement	Four-Year College	703	1.90	1.16	8.38	.001
	Community College	296	1.22	1.22		

Summary of Results

This chapter included a description of the sample, data screening procedures, and the findings for each research question. The findings for each research question are briefly summarized here.

The original sample included 1,595 college students; 596 students did not have any nontraditional characteristics and were excluded from the subsequent analysis. This left a sample of 999 nontraditional students. The number of nontraditional characteristics ranged from 1 to 7 with a mean of 2.62 (*SD*=1.74); 36.6% of studnets (*n*=366) were minimally nontraditional, 34.6% (*n*=346) were moderately nontraditional, and 28.7% (*n*=287) were highly nontraditional.

Research Question 1 was this: what are the college services used by nontraditional students in higher education? The research question was addressed with frequencies and percentages for Questions 26 and 27. The largest percentage of students indicated that their technology need was to own a laptop and have computer access at home (25.3%, *n*=253). The largest percentages of students reported using the library, computers or laptops on campus, and financial aid services.

Research Question 2 was this: what services do nontraditional students express as desired, but not available in higher education institutions? To address this research question, frequencies and percentages were used for Questions 32 to 36. The largest percentage of students strongly agreed that they desired the following: (a) 75.1% (*n*=750) strongly agreed with *Offer lower tuition rates*; (b) 71% (*n*=713) strongly agreed with *Offer assistance with tuition needs through scholarships, aid and/or work study;* (c) 57.2% (*n*=571) strongly agreed with *Offer financial aid services*; (d) 45.1% *(n*=451) strongly agreed with *Offering extended library hours*; (e) 44.9% (*n*=449) strongly agreed with *offer additional summer classes*; (f) 44.5% (*n*=445) strongly agreed with *Offer extended hours for the on-campus computer lab;* (g) 43.4% (*n*=434) strongly agreed with *Offer library resources online*; (h) 41.3% (*n*=413) strongly agreed with *Offer a computer lab on campus;* and (i) 40.1% (*n*=401) strongly agreed with *Offer student employment services.* In addition, over 40% of students indicated that it was extremely likely they would *seek advice on choosing courses, actively participate in your class, get to know persons of different racial/ethnic backgrounds, seek friendships with students with similar background, find a place on campus to study between classes, find a place on campus to relax between classes,* and *ask for financial assistance when needed* (40.4%, *n*=404).

The second part of Research Question 2 was this: does the results differ between minimally nontraditional students, moderately nontraditional students and highly nontraditional students? To address this question, the responses to Question 32 to 36 were averaged to create composite scores. ANOVA was used to assess the differences in the composite variables. There was no statistically significant difference in the average agreement with desired services by type of student. There was a statistically significant

difference in average likelihood of using services and activities by type of student. Minimally nontraditional students had significantly higher average likelihood of using services and activities scores than highly nontraditional students did. Also, moderately nontraditional students had significantly higher average likelihood of using services and activities scores than highly nontraditional students did.

Research Question 3 was this: how actively engaged are nontraditional students on college campuses? Questions 28-31 were analyzed with frequencies and percentages; an ANOVA was used to examine the association between the responses and type of student (minimally nontraditional students, moderately nontraditional students, and highly nontraditional students). An ANOVA was also used to address the question does the results differ between minimally nontraditional student, moderately nontraditional students and highly nontraditional students? A total of 68.7% of students reported having a conversation with a faculty member outside of class; 85.5% reported working regularly with a faculty member outside of class; 45.3% reported participating in study group or discussion groups; 32.4% reported organizing any off-campus study opportunities. There was also a statistically significant difference in average campus involvement by type of student. The minimally nontraditional students had significantly higher average campus involvement scores than moderately traditional and highly nontraditional students did.

Research Question 4 was this: to what extent do nontraditional students who attend traditional four year institutions differ in their desired support services from those nontraditional students who attend community colleges? *T* - tests for independent samples were used to assess this research question. Students in the four-year college and community

college had similar scores for average agreement with desired services and average likelihood of using services and activities.

Research Question 5 was this: to what extent do nontraditional students who attend traditional four year institutions differ in the degree of campus involvement from those nontraditional students who attend community colleges? *T* -tests for independent samples were used to assess this research question. The results showed that students attending the four-year college had a greater degree of campus involvement than students attending the community college.

Chapter Summary

This chapter entailed results and interpretations of the data analysis regarding the study instruments as well as the data analysis pertaining to the research questions which provided a basis for this study. These summaries included: descriptive statistics for the survey sample, Analysis of variance and independent t-test. Finally, this chapter concluded with the presentation of results pertaining to the primary research questions.

CHAPTER 5—CONCLUSIONS, DISCUSSION, IMPLICATIONS

Introduction

This chapter presents an overview of the study, including its purpose, conceptualization, scope of literature, research design, and intended contributions to knowledge about reform for educational researchers and practitioners. Additionally, this chapter includes a summary of major findings and conclusions from the study as well as a discussion of implications of the findings for theory and practice.

Overview of the Study

Nontraditional student enrollment has continued to rise each year with the Department of Education estimating that 43% of the total undergraduate student population can be considered nontraditional. (U.S. Department of Education, National Center for Educational Statistics, 2012, p. 286). Spanier (2001) acknowledges that institutions of higher education have been successful in teaching, learning, and service. Furthermore, he advises institutions of higher education of the increased demands for accountability from public and community institutions due to the rapid changes in enrollment trends and demographics. Spanier acknowledges that "[c]onsequently, institutional leaders can be assured that they will be required to aggressively confront the challenge of engaging nontraditional students on their college campuses" (p. 6). Educational leaders must be aware of their institutions' barriers as well as the literature that suggested support services that aid in nontraditional student success.

State government and outside funding agencies are calling for increased completion rates for institutions nationwide (N. B. Miller, 2014). Choy and the National Center for Education Statistics (2002) acknowledge that only 31% of those nontraditional students

enrolled in 1989-1990 earned their bachelor's degrees (p. 15). Additionally, research notes that part-time enrollment and lack of financial assistance widen the college attainment gap (Horn, 1996; Jacobs & King, 2002). Graduation of adult learners will benefit overall postsecondary completion goals, but their performance continues to be of concern. Furthermore, Brock (2010) discusses statistics that indicate that student outcomes differ noticeably based on the type of institutions that students attend. He noticed that undergraduates who begin their studies at four-year colleges are twice as likely to graduate as those who begin at two-year institutions. Research has shown that increasing the completion rates of nontraditional students would benefit overall institution completion rates, but there is still a gap in achievement between traditional and nontraditional students. With numerous agencies and funding sources placing the spotlight on this population, there is still a lack of data to identify thorough competition metrics. This is compounded by the lack of federal reporting requirements that accurately report nontraditional student metrics (Brock, 2010). While this will likely change, nontraditional students are currently slipping through the cracks.

The current focus on higher education has placed emphasis not only on degree completion but on student persistence and retention as well. Miller (2014) notes that "[t]he federal government's heightened focus on college completion rates, and pressure to tie state funding to performance metrics, at least partially associated with graduation rates, are catalysts for the discussion" (Miller, 2014, p. 141). With performance now being tied to funding in many states and the continued growth of nontraditional student enrollment, a discussion nationwide has begun about how to help nontraditional students become college graduates.

Additionally, the College Board (2008) notes that the shortage of skilled workers cannot be met by high school graduates alone. Reyna (2010) argues that "[t]o address this, adult learners need to be connected with educational opportunities, in order to qualify for skilled positions" (p. 9). The numerous job listings cannot be filled due to the lack of skilled workers, which is a complaint made by business owners and major companies alike. To prepare the workforce for tomorrow's jobs, we must increase the completion rates for nontraditional students. Historically, traditional students have had higher completion rates than their nontraditional counterparts. Shapiro acknowledges that "[t]here is a gap in the achievement of traditional and nontraditional students. Traditional-age students have a higher six-year completion rate than nontraditional students" (p. 2). With low completion rates, nontraditional students often leave before degree attainment and often in student loan debt.

The purpose of this research was to (1) identify the college services used by nontraditional students in higher education; (2) determine services nontraditional students express that they desire, but that are not available in higher education institutions; (3) determine how actively engaged nontraditional students are on college campuses; (4) determine to what extent nontraditional students who attend traditional four-year institutions desire different services than those nontraditional students who attend community colleges do; and (5) identify to what extent nontraditional students who attend traditional four-year institutions differ in their degree of campus involvement from those nontraditional students who attend community colleges. The overarching question for this study is this: What are the institutional factors contributing to the success of nontraditional students?

This study endeavored to ascertain the interaction among the following variables: college services used, college service desired, student engagement, school type and amount

of nontraditional student traits by the use of quantitative methods. Data were collected from surveys representing each construct and were aggregated and subjected to statistical analyses in order to answer the research questions. The following measures were used in this study to determine strengths of correlations among constructs: *Nontraditional Student Survey* and *A Survey of Needs and Services for Postsecondary Nontraditional Students*.

The sample population for this study included two colleges located in southwest Louisiana: one is a traditional four-year institution (College A) one school is a community college (College B). All students from both institutions were sent the survey. Data were collected through SurveyMonkey, an online program designed for survey research and data analyses. Data were then exported to IBM SPSS Statistics in order to conduct further statistical analyses.

Conceptual Framework

The original conceptual framework that guided this study was developed as a researched-based framework regarding the relationship among summation of research on institutional barriers, support services, completion, retention, adult learning theory and student engagement theory. After the analysis of data, the researcher discovered that although research has presented completion and retention rates as important factors in nontraditional student success, these constructs are truly a measure of nontraditional student success. The new conceptual framework, figure 6, places completion and retention at the center of the framework. This represents completion and retention as the main objective of the framework.

Adult learning theory was developed when pedagogy did not meet the needs of adult learners. Student engagement theory researches the effects of campus engagement on academic success. These theories share one-fourth of the graphic representation to account

for their effects on nontraditional students. Research shows that nontraditional college students are capable of success even though the adjustment to college life adds significant stress to the student (Tones et al., 2009). Dietsche (2012), reported that college students benefit from college support services. These same services were found to be unavailable to nontraditional students in Tones, Fraser, Elder and White (2009). Institutional support services represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success. Keith (2007), argues that institutional barriers can cause students stress that can result in withdrawal. Institutional barriers represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success.

Figure 6. Conceptual framework of factors of nontraditional students' success

For this research, the six categories discussed by Horn (1996) in the report titled "Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence

and Attainment Among 1989–90 Beginning Postsecondary" was used. Horn defined nontraditional students as those students who: (1) Delays enrollment; (2) Works full time while enrolled; (3) Is considered financially independent for purposes of determining eligibility for financial aid; (4) Has dependents other than a spouse; (5) Is a single parent; (6) Does not have a high school diploma (p. 4-8). This study supports Horn's definition of defining nontraditional students by characteristics other than just age. The original sample included 1,595 students. Students were considered nontraditional students based on their responses to seven survey questions. Based on these responses, 596 students did not have any nontraditional characteristics and were excluded from the subsequent analysis. This left a sample of 999 nontraditional students. The majority of students in the sample were women (68%, n=679) and Caucasian (68%, n=679); 49.4% (n=494) were 20-29 years of age. In terms of financial independence, 32.2% (n=323) reported having legal dependents other than a spouse and 58.3% (n=582) reported no having any dependents. Only 30.5% (n=305) had children. Of those with children, 34.9% (n=102) had one child and 34.9% (n=102) had two children. The largest percentage of children were elementary school aged (13.3%, n=133). Only 8.2% (n=917) of the sample served in the military. Most students reported working outside of school (72.8%, n=727) and working part-time (56.6%, n=413); 38.3% (n=271) reported working 35 or more hours each week. The highest level of educational attainment for 65.5% (n=654) of the sample was high school.

Nontraditional students are characterized as the "[l]argest subset of students in the nation" (Advisory Committee on Student Financial Assistance, 2012, p. 1). These students face many barriers before deciding to enter post-secondary educational institutions. Once accepted, these students also face institutional barriers. Keith (2007) argues that institutional

barriers can cause students stress that can result in withdrawal. Institutional barriers represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success. Research Question 2, (What services do nontraditional students express as desired, but not available in higher education institutions?), addressed the aspect of institutional barriers. The largest percentage of students strongly agreed that they desired the following:

a. offer additional summer classes;
b. offer additional online classes;
c. offer extended hours for advising;
d. offer career counseling;
e. offer extended office hours for professors and instructors.

Nontraditional college students are capable of success even though the adjustment to college life adds significant stress to the student (Tones et al., 2009). Dietsche (2012), reported that college students benefit from college support services. Institutional support services represent one-fourth of the graphic representation to illustrate the effects on nontraditional student success. Research Question 1, (What are the college services used by nontraditional students in higher education?), addressed the aspect of institutional support services. The largest percentage of students indicated that their technology need was to own a laptop (68.1%, n=680) followed by having a computer access at home (25.3%, n=253). Students reported using a variety of services at school. The largest percentages of students reported using the library (80.3%, n=802), computers or laptops on campus (69.1%, n=690), and financial aid services (67.4%, n=673). The smallest percentages of students reported using child care services (1.8%, n=18) and the Student Emergency Fund (3.4%, n=34). Six percent of students (n=60) reported using other services, which included the following: (a)

academic Services, (b) advisor, (c) disability services, (d) financial aid services, (e) food services, (f) health services, (g) scholarships, (h) transportation, and (i) VA benefits.

Numerous studies suggest that there is a positive relationship between student engagement and academic success (Heng, 2014). Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991). Research Question 3 (How actively engaged are nontraditional students on college campuses?), addressed the aspect of engagement and the aspect of adult learning theory. A total of 68.7% (n=686) of students reported having a conversation with a faculty member outside of class and 85.5% (n=854) reported working regularly with a faculty member outside of class. Only 45.3% (n=453) reported participating in study groups or discussion groups and 32.4% (n=324) reported organizing any off-campus study opportunities.

Research Questions

Five research questions were framed in order to address the variables and the methodology for this study. These questions are addressed by finding the relationships between and among the variables. Quantitative research methods were used to answer the research questions regarding the variables in the study. Data were collected from a sample population, which includes a traditional four-year institution and a community college. Both colleges were located in southwest Louisiana and in the same city, with college B having satellite campuses in rural areas. A total of 1595 students submitted responses; however, 999 usable surveys met the criteria for analysis. The data analysis included descriptive statistics, analysis of variance (ANOVA) and *T-tests* for independent samples.

Research Questions

In this section the research questions guiding the study will be reviewed.

Research Question 1.

What are the college services used by nontraditional students in higher education?

Research Question 2.

What services do nontraditional students express as desired, but not available in higher education institutions?

Research Question 3.

How actively engaged are nontraditional students on college campuses?

Research Question 4.

To what extent do nontraditional students who attend traditional four-year institutions differ in their desired support services from those nontraditional students who attend community colleges?

Research Question 5.

To what extent do nontraditional students who attend traditional four year institutions differ in their degree of campus involvement from those nontraditional students who attend community colleges?

Major Findings

Statistical findings and results of the quantitative analysis relative to the research questions were reported in Chapter 4. This section will outline the major findings from the study.

Major Finding 1

Most students expressed financial concerns.

Major Finding 1 Conclusion

Table 3 shows the frequencies and percentages of the challenges students face in completing their programs. The largest percentages of students reported the need to work while in school as a challenge followed by financial problems. Horn's (1996) definition of nontraditional students included those students who work full time (35 hours or more per week) while enrolled. Previous research has demonstrated that nontraditional students are more likely to have time and location constraints that can cause conflict with their school work. These students take longer to complete their degrees (Pontes & Pontes, 2012). Taniguchi and Kaufman's (2005) research supports implications for employers who offer flexible work schedules to employees attending college. (Taniguchi & Kaufman, 2005). In this study, most students reported working outside of school.

Major Finding 2

Nontraditional students reported using library services, computers or laptops on campus, and financial aid services.

Major Finding 2 Conclusion

Nontraditional students use institutional support services to achieve their academic goals. Support services can assist nontraditional students as they try to navigate the collegiate experience. These structures can increase the likelihood of retention and competition of this vast group of students. Students reported using a variety of services at school. The largest percentages of students reported using the library (80.3%), computers or laptops on campus (69.1%), and financial aid services (67.4%).

Major Finding 3

Nontraditional students desire additional summer classes, additional online classes, extended hours for advising, offer career counseling, and offer extended office hours for professors and instructors.

Major Finding 3 Conclusion

Researchers examining nontraditional students have tried to locate the variable that will increase the achievement of this population and thus help to address the lack of skilled workers. This study researched the services desired by this population. Campus support services are important to the success of nontraditional students. Campus support can provide much needed assistance to the nontraditional student population. Many institutions worldwide are implementing different programs and support services to assist nontraditional students. This finding suggests the support services that nontraditional students would like offered, these services can increase their likelihood of completion and retention.

Major Finding 4

Nontraditional students are involved on college campuses.

Major Finding 4 Conclusion

Wolf-Wendel, Ward, and Kinzie (2009), acknowledge that theories and constructs have connected student success, including involvement, engagement, and integration which can serve as a common language and information to inform understanding of the current obstacles facing higher education. (Wolf-Wendel, Ward, & Kinzie, 2009 p. 410). Student engagement has become a major focus of many universities programs and clubs worldwide. Kahn (2014), argues that student engagement has been problematic since the rise of universal forms of higher education. Trow (2006 as cited in Kahn 2014) acknowledges that with the

increase of the age of cohorts attending universities, student engagement rates decline. In this study, students reported having a conversation with a faculty member outside of class and working regularly with a faculty member outside of class. Furthermore, as seen in Table 20, there was a statistically significant difference in average campus involvement by type of student. The minimally nontraditional students had significantly higher average campus involvement scores than moderately traditional and highly nontraditional students. Research suggest that nontraditional students are not involved on college campuses, these findings are contrary. Tinto argues that students need to integrate themselves into the college system. This integration includes social and intellectual connections. Higher levels of campus involvement can lead to greater success in college (Pascarella & Terenzini, 1991).

Major Finding 5

Students attending the 4-year college had a greater degree of campus involvement than students attending the community college.

Major Finding 5 Conclusion

Astin (1984, as cited in Wolf-Wendel et al., 2009), hypothesized that the more involved students are, the more successful they will be in college. He argues that engagement is an investment of psychological and physical energy. Furthermore, Brock (2010) discusses statistics that indicate that student outcomes differ noticeably based on the type of institution they attend. As seen in Table 22, students attending the four-year college had a greater degree of campus involvement than students attending the community college.

Summary of Findings

This study highlights the number of college students who have to work due to financial burdens. Osborne et al. (2004) noted that those nontraditional students who were currently

working described themselves as time-poor. It was difficult to manage their time between work and studies, especially for those who had full-time jobs. Nontraditional students use campus support services which include the following: the library, computers or laptops on campus, and financial aid services. Nontraditional students would like their institutions to offer these forms of campus support: lower tuition rates, assistance with tuition needs through scholarships, aid and/or work study; financial aid services, extended library hours; additional summer classes extended hours for the on-campus computer lab, library resources online, a computer lab on campus; and student employment services. There was no statistically significant difference in average agreement with desired services by type of student but there was statistically significant difference in average likelihood of using services and activities by type of student. There was also a statistically significant difference in average campus involvement by type of student. The results also showed that students attending the 4-year college had a greater degree of campus involvement than students attending the community college did.

Discussion and Implications of Major Findings

The nontraditional student population continues to rise and this research can be used to assist in identifying institutional attributes that can contribute to their success. The type of college the student attends can affect their campus engagement. The number of nontraditional student traits can also affect their success in post-secondary institutions. These findings have implications for theory, practice, leadership and future research.

Implications for Theory, Practice, Leadership and Future Research

In the previous sections, the major findings and conclusions concerning the relationships among variables were discussed. The following section addresses the study in a

broader sense and discusses implication for theorists, practitioners, leaders, and future researchers.

Implications Related to Conceptual and Theoretical Concerns

The research conducted regarding nontraditional students affirms several findings from other researchers. Horn (1996) explains that nontraditional college students can be placed on a continuum based on the number of number of characteristics he ascribes to nontraditional students that these college students exhibit. Students are minimally nontraditional if they have only one nontraditional characteristic. These students made up 25% to 31% of undergraduates in the three National Postsecondary Student Aid Study (NPSAS) surveys conducted in 1986-87, 1989-90, and 1992-93. Based on this classification, 36.6% (n=366) of students surveyed in this study were minimally nontraditional. Students are considered moderately nontraditional if they have two or three characteristics. These students, who made up 25 to 31% of undergraduates in the three NPSAS surveys. Based on this classification, 34.6% (n=346) of students surveyed in this study were moderately nontraditional. Students are considered highly nontraditional if they have four or more characteristics. These students accounted for about one in four undergraduates in the three NPSAS surveys. Based on this classification, 28.7% (n=287) were highly nontraditional. While the ratios were different, this study affirms that nontraditional students can be placed on a continuum and that the number of Horn's (1996) nontraditional traits they exhibit can affect their educational goals.

The Indiana University Center Survey (2006) revealed some interesting statistics in participation and volunteer work of nontraditional students: Only 27% of nontraditional adult students participated in extracurricular activities. On the other hand, 69% of those traditional-age students chose to become involved in extracurricular activities. (National Survey of

Student Engagement, 2006). This study affirmed that nontraditional students are more engaged at traditional four-year- institutions as compared to students who attend community colleges. There was a statistically significant difference in average campus involvement by type of student. Only 12% of nontraditional adult students chose to become involved in research with a faculty member, per the Indiana University Center Survey (2006), whereas 23% of traditional-age students worked with faculty on research. In this study 85.5% (n=854) reported working regularly with a faculty member outside of class which contradicts the findings of the Indiana University Center Survey (2006).

Kun (2008) found links between student engagement and student retention. Kahn also discusses Pascarella's (2010) research which links student engagement to academic performance. Furthermore, Tinto argues that students need to integrate themselves into the college system. This integration includes social and intellectual connections. Tinto's theory of student integration asserts the following: "The matching between the student's motivation and academic ability and the institution's academic and social characteristics help shape two underlying commitments: commitment to an educational goal and commitment to remain with the institution" (Cabrera, Nora, & Castaneda, 1993, p. 124). This study found that nontraditional students are engaged on college campuses, but the number of nontraditional traits they exhibit affects how active this population is. The majority of the sample (n=25.7) had been enrolled in their program for two semesters therefore, long term retention cannot be noted.

Horn (1996) attributes a substantial part of nontraditional students' lower chance of completing their degrees within five years of enrollment to their overrepresentation in part-time enrollment. Students are usually considered to be part-time if they enroll for fewer than

12 semester credit hours. 22.3 percent of the population was enrolled part-time. As previously mentioned, the majority of the sample (n=25.7) had been enrolled in their program for two semesters therefore, long term retention cannot be noted.

Each year students have the daunting task of trying to figure out how they will pay for school. According to the Condition on Education Report (2016), 85% of first-time, full-time undergraduate students at four-year degree-granting postsecondary institutions received financial aid. Hatfield (2003), notes that financial aid was created to assist students obtain access to higher education regardless of their economic circumstance. Although no specific aid types are designed to fit the needs of adult learners, federal and state programs do not limit aid based on a student's age" (p. 30). In this study nontraditional students reported the need to work while in school as a challenge followed by financial problems.

Campus support services are important to the success of nontraditional students. Markle (2015) surveyed nontraditional students and asked them "What services could the university provide to help reduce your school-related stress?" Some suggestions included the following:

> Expand course offerings, improve student advising, and increase access to faculty members. Women wanted affordable on-campus child care, and men wanted more night courses. Many felt disadvantaged compared to traditional students and believed accommodations should be made. They proposed exemptions from attendance policies, course credit for work experience, specialized degree programs, and opportunities to "complete courses in their own time." Women in particular felt professors should be more receptive to their family-related needs. Men were more likely to request financial assistance such as reduced tuition, scholarships, or work-

> study programs. Several students expressed resentment over their perceived second-class treatment, and one recommended sensitivity training for professors. (Markle, 2015, p. 279)

This study affirms the need for additional summer classes, additional online classes, extended hours for advising, career counseling, and extended office hours for professors and instructors.

School, work, and family all require great heights of commitment. Researchers have studied interrole conflict among the domains of work, family, and school. 41.7 percent of the population in the study had dependents, 29.2 % reported the difficulty of caring for a family while in school. Furthermore, 52.7 % of the sample reported time constraints as a challenge towards their degree competition thus affirming Interrole Conflict Theory.

Brock (2010) argued that the type of college nontraditional students attend can affect their experience and progression. This study affirms that the type of school that nontraditional students attend does have an effect on their levels of campus engagement.

Implications for Practice

According to the Projections of Education Statistics to 2019 (Hussar & Bailey, 2011), the enrollment numbers for nontraditional college students are projected to increase in the coming years. This report projects that of the number of college students enrolled for the year 2019, over 9,000,000 will be students age 25 and older, and of the number for part time enrollment, over 5,500,000 will be students age 25 or older. Scott and Lewis (2011) argue that "[i]dentifying this recent increase in enrollment and attributing factors is important to note because it demonstrates the need for colleges and universities to gain awareness and sensitivity to the academic and social needs of the increasing nontraditional student

population" (p. 2). By supplying institutional support services, decreasing systemic barriers and applying student engagement theory, nontraditional students may gain the resources, privileges, and support necessary for success. This examination takes the position that educational leaders who are aware of and make available support services as well as decrease barriers will support students' achievement.

This study also suggests that nontraditional students can be placed on a continuum and the services desired differ depending on the number of traits. Moreover, the type of institution that nontraditional students attend affects their levels of engagement. To increase nontraditional student success, there are support services that must be available but also systemic barriers that must be removed. The term, nontraditional student, can be used to identify many traits that can be a deterrent to degree completion. Practitioners must be aware of this population and meet them where they are to encourage retention and competition.

Implications for Educational Leaders

In the current climate of educational cuts, educational leaders must think outside the box to increase their competition and retention rates for nontraditional students. Copper (2012), noted that support services are imperative to student academic success. These services should have academic, social, and financial aspects (Cooper, 2010). This study provides a model, figure 7 and figure 8, to assist nontraditional students obtain their educational goals. Both models were derived from responses of nontraditional students in this survey. Educational leaders can implement these models to increase the completion and retention of their nontraditional student populations.

Both the model of for Nontraditional Student Success for Community Colleges and the model for Nontraditional Student Success for Traditional Four - Year Institutions highlight

the importance of academic and career assistance. Nontraditional students often work as supported by this research and may not work on the academic studies times, thus it is important to offer extended hours. In this study, more than half of the nontraditional students that participated in this survey expressed the need to have access to extended library hours, computer lab hours, advising hours and office hours for professors and staff members. Academic advisors also play a crucial role in helping nontraditional students navigate the college terrain, but Brock (2010) found that 32% of incoming freshman did not attend a freshman orientation program and half did not meet with or recall seeing an academic adviser during their first four weeks of college. While college advisors influence college student competition rates, their traditional work hours can be a hindrance to nontraditional students. Nontraditional student time constraints can be circumvented by offering additional summer and online courses so that they can continue to progress towards completion. Over 700 nontraditional students expressed a desire to meet with professors or staff members at nontraditional work hours. While extended office hours could be costly to colleges, offering phone or video conferences by schedule can assist nontraditional students in obtaining access to their professors at convenient times for both individuals.

Both the model of for Nontraditional Student Success for Community Colleges and the model for Nontraditional Student Success for Traditional Four - Year Institutions also highlight the importance of financial assistance. According to the Condition on Education Report (2016), 85% of first-time, full-time undergraduate students at four-year degree-granting postsecondary institutions received financial aid. Majority of students surveyed expressed a desire for affordable tuition and an increase in scholarship, work study and an emergency financial assistance program. Finances are a stress factor for numerous college

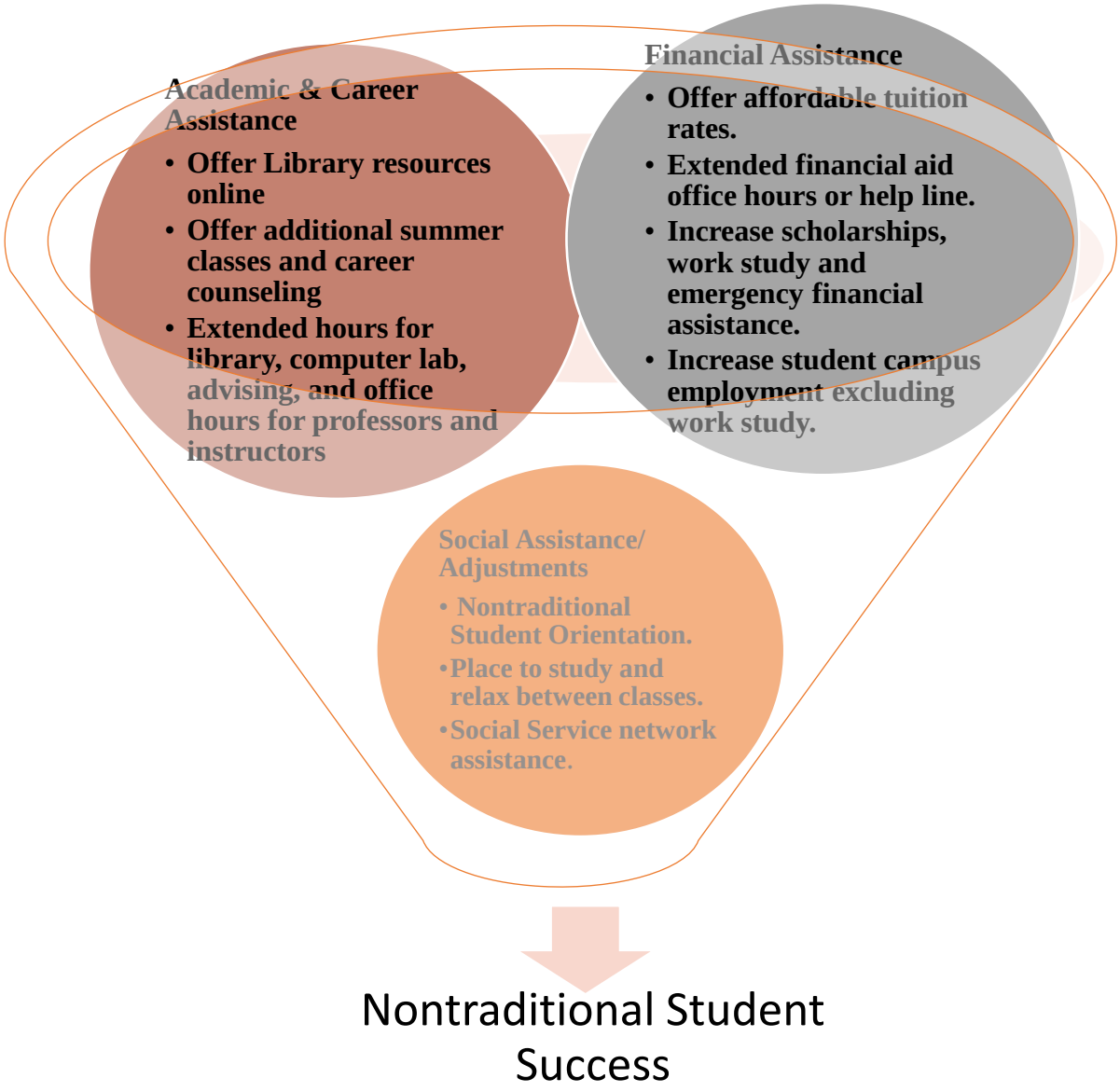

Figure 7: Davis Model for Nontraditional Student Success for Community Colleges

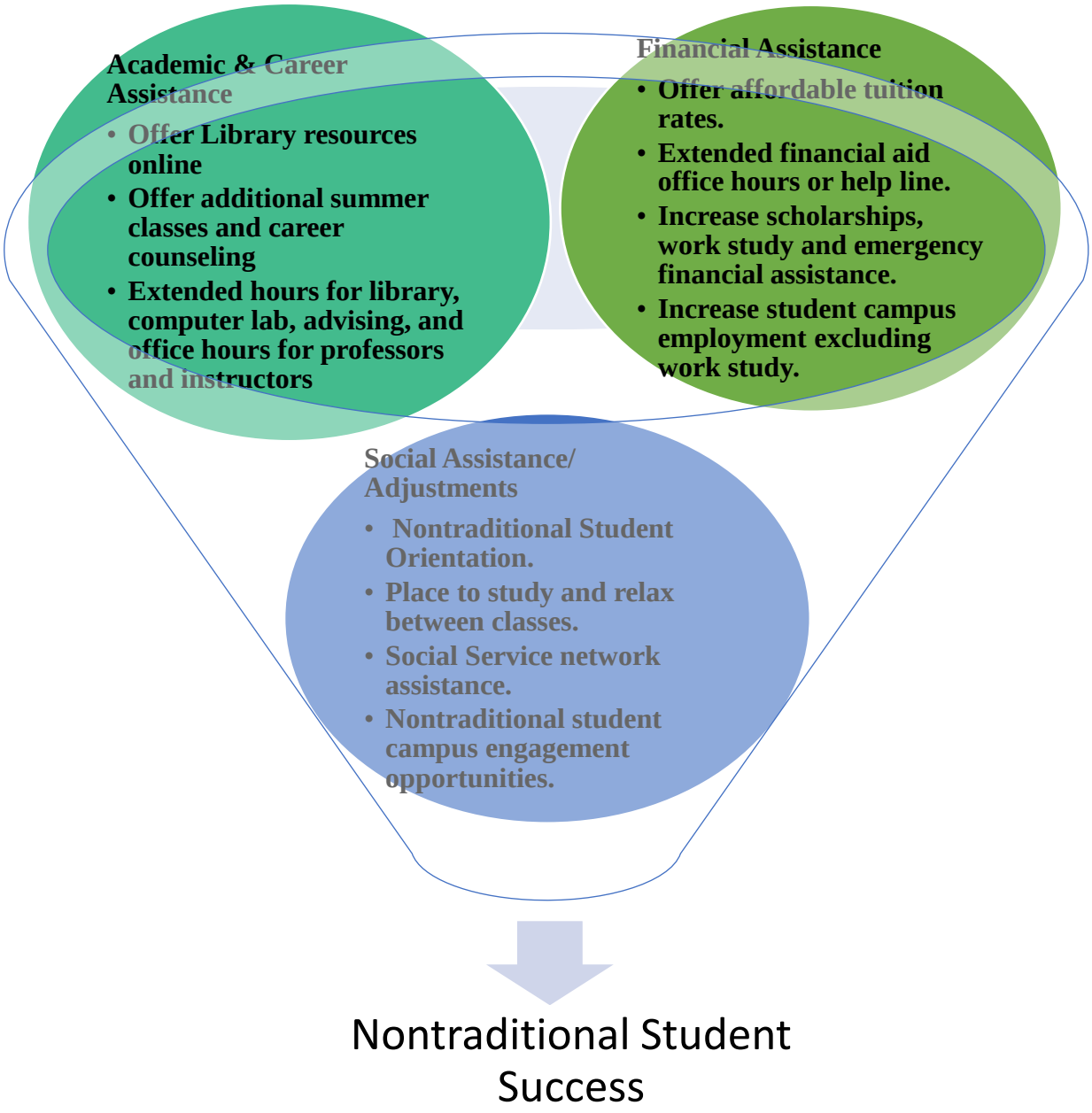

Figure 8: Davis Model for Nontraditional Student Success for Traditional Four - Year Institutions

students working towards their educational goal. Extending the hours of operation for the financial aid office or implementing an after-hour help line could assist nontraditional students navigate their financial aid complications. Furthermore, implementing an emergency financial assistance program could prevent mid-semester nontraditional student withdrawals due to financial circumstances. While College B has this assistance program, students were unaware of its existence. Also, if colleges allowed for temporary employment positions for their students, this could minimize nontraditional student financial burden. Colleges offering these positions would be able to work around student schedules, unlike some traditional employers.

Both the model of for Nontraditional Student Success for Community Colleges and the model for Nontraditional Student Success for Traditional Four - Year Institutions also emphasize the importance of social adjustments and assistance. Transitioning to post-secondary institutions can stressful to nontraditional students. Brock (2010) noted that 32% of incoming freshman did not attend a freshman orientation program. Colleges should offer a nontraditional student orientation at various times and days to spotlight the services geared to toward this population. This orientation could also be streamed or uploaded to the college's website. A nontraditional student orientation could also highlight the opportunities for student engagement. While pervious research questions the rate of nontraditional student engagement, this study found that nontraditional students were involved on their respective campuses. Wyatt (2011) noted that students must become engaged on their college campus to achieve academic and personal success. Furthermore, Pascarella and Terenzini noted the similar findings and argued that students should be helped early in their academic careers so that they can find their niche and feel they are a part of the institution's life. Full immersion

into the collegiate environment includes participation in orientation programs and continual receipt of ongoing academic and social assistance. Implementation of a social service assistance program can assist students in crisis with finding area agencies that can assist them and thus lower their chance of withdrawing from the college.

The increase in the nontraditional student population and their success should be a vital topic for universities and colleges worldwide. These models can serve as a reference to increase nontraditional student retention and completion in traditional four-year colleges and community colleges.

Implications for Future Practice

This study offers multiple implications for future research. Opportunities for future research are presented below:

a. Malcolm Knowles identified characteristics of adult learners. With the continuum identified and affirmed in this study, a comparison of adult learning traits for minimally, moderately, and highly nontraditional students could be beneficial.
b. A study on the perceptions and level of understanding of faculty members as it concerns nontraditional students could lead to successful professional development.
c. With the continuum identified and affirmed in this study, a comparison of minimally, moderately, and highly nontraditional students' grade point averages could identify that the nontraditional population that needs more assistance.
d. Retention can often be an issue for part-time nontraditional students. Research geared to part-time nontraditional student can positively affect retention and completion.

e. Nontraditional students often face obstacles that traditional students do not. A study of nontraditional students who have obtained their educational goals could lend insight to how they were able to combat the obstacles.

f. Nontraditional student academic success is very important. A study that looks at grades and nontraditional student traits can shed light on the success of minimally, moderately and highly nontraditional students.

g. Research has suggested that nontraditional students differ from traditional college students. A study comparing the services desired by each population can be used to identify the differences and similarities between the groups.

h. Incorporating additional follow up questions to the Nontraditional Student Success Survey can offer clarification and enhance the explanations of the responses.

Chapter Summary

Chapter 5 gave an overview of the study, including the literature review, conceptual framework, and methodology. Each research question was reviewed, and the major findings were thoroughly discussed. Implications for theory, practice, and future research were discussed.

Dissertation Summary

This quantitative study investigated nontraditional students in order to analyze the relationships between services used, services desired, the number of nontraditional student traits, levels of engagement, and the type of institution. A conceptual framework was created in reference to the literature concerning nontraditional student success. Five research questions were established to guide the research methodology and the study's overarching question: what are the institutional factors contributing to the success of nontraditional

students? The study uses two colleges in Southwest Louisiana, one traditional four-year institution and one community college. All students at these two institutions received the survey, but only those exhibiting at least one nontraditional trait were included in the data analysis. Data analyses included descriptive statistics and demographics for the sample, descriptive statistics for each item, analysis of variance (ANOVA) and T-tests for independent samples.

Major findings of the study indicate that: (1) The largest percentages of students reported the need to work while in school (64%, n=639) as a challenge, followed by financial problems (54.7%, n=546); (2) the largest percentages of students reported using the library (80.3%, n=802), computers or laptops on campus (69.1%, n=690), and financial aid services (67.4%, n=673).; (3) The largest percentage of students strongly agreed that they desired the following: 44.9% (n=449) strongly agreed with offer additional summer classes; 38.9% (n=389) strongly agreed with offer additional online classes; 34.2% (n=342) strongly agreed with offer extended hours for advising; 29.5% (n=295) strongly agreed with offer career counseling; 28.2% (n=282) strongly agreed with offer extended office hours for professors and instructors; (4) In this study, a total of 68.7% (n=686) of students reported having a conversation with a faculty member outside of class and 85.5% (n=854) reported working regularly with a faculty member outside of class. Only 45.3% (n=453) reported participating in study group or discussion groups and 32.4% (n=324) reported organizing any off-campus study opportunities; (5) there was a statistically significant difference in average campus involvement by type of student, $F(2, 996)=12.56$, $p=.00$. The minimally nontraditional students had significantly higher average campus involvement scores ($M=1.93$, $SD=1.18$) than moderately traditional ($M=1.65$, $SD=1.17$) and highly nontraditional students ($M=1.70$,

SD=1.19); (6) Students attending the four-year college had a greater degree of campus involvement than students attending the community college did.

These major findings have several implications for theory and practice, for educational leaders and future research. The Davis Model for Nontraditional Student Success in Community Colleges and Traditional Four-Year Institutions can serve as a guide to leaders to implement services desired by this population. The Nontraditional Student Success Survey can be used as a tool for colleges to determine the needs of their nontraditional student although this population is very diverse and complicated, this research can serve as a foundation for future research.

REFERENCES

Adelman, C. (2006). *The Toolbox revisited: Paths to Degree Completion from High School Through College*. U.S. Department of Education. Retrieved from https://www2.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf

Aderinto, J. A. (2006). An Overview of Selected Theories of Adult Learning. *International Journal of Learning*, *12*(12), 139–143.

Advisory Committee on Student Financial Assistance. (2012). *Pathways to Success: Integrating Learning WIth Life and Work to Increase National COllege Completion* (A Report to the U.S. COngress and Secretary of Education). Retrieved from http://files.eric.ed.gov/fulltext/ED529485.pdf

Alderdice, J. (2015). The Informed Student-Consumer: Regulating For-Profit Colleges by Disclosure. *Harvard Civil Rights-Civil Liberties Law Review*, *50*(1), 215.

Appel, H., & Taylor, A. (2015). Education with a Debt Sentence: For-Profit Colleges as American Dream Crushers and Factories of Debt. *New Labor Forum (Sage Publications Inc.)*, *24*(1), 31.

Ary, D., Jacobs, L., Razavieh, A., & Sorensen, C. (2006). *Introduction to Research in Education* (7th ed.). ThomsonWadsworth.

Attewell, P., Lavin, D., Domina, T., & Levey, T. (2006). New Evidence on College Remediation. *The Journal of Higher Education*, (5), 886.

Barrier. (2015). *Merriam-Webster*. Retrieved from http://www.merriam-webster.com/dictionary/barrier

Bauman, S., Wang, N., DeLeon, C., Kafentzis, J., Lopez, M., & Lindsey, M. (2004). Nontraditional Students' Service Needs and Social SUpport Resources: A Pilot Study. *Journal of College Counseling, 7*, 13–17.

Baum, S., Kurose, C., Goldrick-Rab, S., Kinsley, P., Melguizo, T., & Kosiewicz, H. (2013). *Bridging the Higher Education Divide* (Strengthening Community Colleges and Restoring the American Dream). The Century Foundation Report. Retrieved from http://production.tcf.org.s3-us-west-2.amazonaws.com/app/uploads/2016/03/08200527/20130523-Bridging_the_Higher_Education_Divide-REPORT-ONLY.pdf

Baum, S., Little, K., & Payea, K. (2011). *Trends in Community College Education: Enrollment, Prices, Student Aid, and Debt Levels*. College Board. Retrieved from http://trends.collegeboard.org/sites/default/files/trends-2011-community-colleges-ed-enrollment-debt-brief.pdf

Baum, S., & Payea, K. (2005). *The Benefi ts of Higher Education for Individuals and Society* (Trends in Higher Education Series). College Board. Retrieved from http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf

Berube, A. (2010). *State of Metropolitan America: on the Front Lines of Demographic Transfprmation* (Educatioanl Attainment) (pp. 104–117). The Brookings Institution Metropolitan policy progra. Retrieved from http://www.brookings.edu/~/media/research/files/reports/2010/5/09-metro-america/metro_america_report.pdf

Bourner, T., & Hamed, M. (1987). *Entry Qualifications and Degree Performance*. London: Council for National Academic Awards.

Bowie, D. (2016, January). Enrollemnt Numbers [Email].

Brennan, J. (1986). Student learning and the "capacity to benefit": the performance of non-traditional students in public sector higher education. *Journal of Access Studies*, 23–32.

Brock, T. (2010). Young Adults and Higher Education: Barriers and Breakthroughs to Success. *Future of Children*, *20*(1), 109–132.

Cabrera, A. F., Nora, A., & Castaneda, M. B. (1993). College Persistence: Structural Equations Modeling Test of an Integrated Model of Student Retention. *The Journal of Higher Education*, (2), 123.

Carifio, J., & Perla, R. (2007). Ten Common Misunderstandings, Misconceptions, Persistent Myths and Urban Legends about Likert Scales and Likert Response Formats and their Antidotes. *Journal of Social Sciences*, *2*, 106–116.

Chaves, C. (2003). Student involvement in the community college setting. *ERIC Clearinghouse for Community Colleges*. Retrieved from http://www.ericdigests.org/2004-1/setting.htm

Chen, J. C. (2014). Teaching Nontraditional Adult Students: Adult Learning Theories in Practice. *Teaching in Higher Education*, *19*(4), 406–418.

Choy, S., & National Center for Education Statistics (ED). (2002). *Nontraditional Undergraduates: Findings from the Condition of Education 2002. NCES 2002-012*. National Center for Education Statistics. Retrieved from eric. (National Center for Education Statistics. Available from: ED Pubs. P.O. Box 1398, Jessup, MD 20794-1398. Tel: 877-433-7827; Web site: http://nces.ed.gov/)

College Board. (2008). *Coming to our senses: Education and the American future. Report of the Commission on Access, Admissions and Success in Higher Education.* Retrieved

from https://professionals.collegeboard.com/profdownload/ coming-to-our-senses-college-board-2008.pdf

Committee on Health , Education, Labor, and Pensions and United States Senate. (2012). *For Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success*. Retrieved from https://www.gpo.gov/fdsys/pkg/CPRT-112SPRT74931/pdf/CPRT-112SPRT74931.pdf

Community Colleges vs. Universities. (2016). [Educationcorner.com]. Retrieved from http://www.educationcorner.com/community-college-vs-university.html

Compton, M., & Schock, C. (2000). The non-traditional student in you. *Women in Business*, (52), 14–16.

Cooper, M. (2010). Student support services at community colleges: A strategy for increasing student persistence and attainment. *Institute for Higher Education Policy*.

Cronk, B. (2014). *How to Use SPSS: A Step-by-Step Guide to Analysis and Interpretation* (8th ed.). Glendale, CA: Pyrczak Publishing.

Davies, P., & Williams, J. (2001). For Me or Not for Me? Fragility and Risk in Mature Students' Decision-Making. *Higher Education Quarterly*, *55*(2), 185–203.

De La Garza, T. R. ., Manuel, M. A. ., Wood, J. L., & Harris III, F. (2016). Military and Veteran Student Achievement in Postsecondary Education: A Structural Equation Model Using the Community College Survey of Men (CCSM). *Community College Enterprise*, *22*(1), 43–54.

Differences Between Community Colleges and 4-Year Colleges. (2014). Retrieved from https://www.educationquest.org/blog/differences-community-colleges-4-year-colleges/

Donavant, B. W., Daniel, B. V., & MacKewn, A. S. (2013). (Dis)connected in Today's College Classroom? What Faculty Say and Do about Mixed-Age Classes. *Journal of Continuing Higher Education*, *61*(3), 132–142.

Dunn, H. (2016, March). 10 Interesting Facts Comparing Community Colleges & 4-Year Institutions. Retrieved from http://campuslogic.com/blog/interesting-facts-comparing-community-colleges-4-year-institutions/

Dynarski, S. (1999). *Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion* (Working Paper No. 7422). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w7422

Eaton, J., & American Council on Education, W., DC. (1992). *Financing Nontraditional Students: A Seminar Report.* Retrieved from eric. (Publications Department FNS, American Council on Education, One Dupont Circle, Washington, DC 20036 ($10 prepaid).)

Edwards, J. B. (2016, April 14). Business & Industry Plenary Luncheon [Keynote Address].

Exposito, S., & Bernheimer, S. sbernheimer@pacificoaks.edu. (2012). Nontraditional Students and Institutions of Higher Education: A Conceptual Framework. *Journal of Early Childhood Teacher Education*, *33*(2), 178–189.

Galbraith, D. D., & Fouch, S. E. (2007). Principles of Adult Learning. *Professional Safety*, *52*(9), 35–40.

Gall, M., Gall, J., & Borg, W. (2007). *Educational Ressearch* (8th ed.).

GED Classes Being Deluged as Unemployed Seek New Skills. (2009). *Community College Week*, *21*(15), 3–4.

Glass, G., & Hopkins, K. (1996). *Test Bank for Statistical Methods in Education & Psychology* (3rd ed.). Boston, MA: Allyn & Bacon.

Glass, G., Peckham, P., & Sanders, J. (1972). Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance,. *Review of Educational Research*, *42*(3), 237–288.

Gordon, E. J. (2014). "Do I Have to Take This Class?" Nontraditional Students' Attitudes toward and Perceptions of a Required Effective Learning Course. *Journal of Continuing Higher Education*, *62*(3), 163–172.

Gravetter, F., & Wallnau, L. (2007). *Statistics for the Behavioral Sciences* (7th ed.). Thomson.

Harper, D. (2010). *American Dream* (Online Etymology Dictionary). Retrieved from www.dictionary.com/browse/american-dream

Hatfield, K. M. (2003). Funding Higher Education for Adult Students. *New Directions for Student Services*, (102), 27–34.

Hayes, K. (1997). Mature Students in Higher Education: III. Approaches to Studying in Access Students. *Studies in Higher Education*, *22*(1), 19–31.

Heng, K. (2014). The Relationships between Student Engagment and the Academic Achievement of FIrst-Year University Students in Cambodia. *Asia-Pacific Education Researcher (Springer Science & Business Media B.V.)*, *23*(2), 179–189.

Horn, L. (1996). *Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence and Attainment Among 1989–90 Beginning Postsecondary* (Statistical Analysis Report). National Center for Education Statistics. Retrieved from https://nces.ed.gov/pubs/97578.pdf

Howell, C. (2001). Facilitating responsibility for learning in adult community college students. *ERIC Clearinghouse for Community Colleges*. Retrieved from http://www.ericdigests.org/2001-4/adult.html

Hussar, W., & Bailey, T. (2011). *Projections of Education Statistics to 2019* (No. 017) (pp. 57–61). Washington, DC.: National Center for Education Statistics, Institute of Education Sciences. Retrieved from http://nces.ed.gov/pubs2011/2011017.pdf

IBM SPSS Statistics. (2016). Retrieved from https://www.ibm.com/marketplace/cloud/statistical-analysis-and-reporting/us/en-us

Jacobs, J. A., & King, R. B. (2002). Age and College Completion: A Life-History Analysis of Women Aged 15-44. *Sociology of Education*, (3), 211.

Karp, M. (2011). *Toward a New Understanding of Non-Academic Student Support: Four Mechanisms Encouraging Positive Student Outcomes in the Community College*. New York: Community College Research Center, Teachers College, Columbia University.

Kasworm, C. (2005). Adult Student Identity in an Intergenerational Community COllege CLassroom. *Adult Education Quarterly, 56*(1), 3–20.

Kline, R. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.

Knowles, M. (1973). *The Adult Learner: A Neglected Species*. Gulf Publishing Company.

Kowalski, C. (1977). *The impact of college on persisting and nonpersisting students.* New York: Philosophical Library.

Kurantowicz, E., & Nizinska, A. (2013). How students “stay the course”: Retention practices in higher education. *Studies in the Education of Adults*, *45*(2), 135–147.

Lubke, G., & Muthen, B. (2004). Applying Multigroup Confirmatory Factor Models for Continuous Outcomes to Likert Scale Data Complicates Meaningful Group Comparisons. *Structural Equation Modeling*, *11*(4), 514–534.

Make Better Decisions with the World's #1 Survey Platform. (2016). Retrieved from https://www.surveymonkey.com/

Markle, G. (2015). Factors Influencing Persistence Among Nontraditional University Students. *Adult Education Quarterly*, *65*(3), 267–285.

Marlowe, M., Ladner, L., King, S., & Boggs, G. (2016). Completion and Transfer Success of High-Achieving Community College Students. *Inside Higher Ed*.

Matthews, D., & Lumina Foundation for Education. (2012). *A Stronger Nation through Higher Education: How and Why Americans Must Achieve a Big Goal for College Attainment. A Special Report from Lumina Foundation*. Lumina Foundation for Education. Retrieved from eric. (Lumina Foundation for Education. P.O. Box 1806, Indianapolis, IN 46206-1806. Tel: 800-834-5756; Fax: 317-951-5063; Web site: http://www.luminafoundation.org)

Mercer, D. (1993). Older coeds: predicting who will stay this time. *Journal of Research and Development in Education*, *26*, 153–163.

Merrill, B., & Tett, L. (2013). Access, retention and withdrawal: A European perspective. *Studies in the Education of Adults*, *45*(2), 115–118.

Miller, C. (2017, January). Enrollment Numbers [Email].

Miller, N. B. (2014). Nontraditional Student Graduation Rate Benchmarks. *Journal of Continuing Higher Education*, *62*(3), 141–151.

Molloy, S., & Carroll, V. (1992). *Progress and Performance in Higher Education: a report on performance monitoring of "standard" and "non-standard" entrants to undergraduate courses*. London: Council for National Academic Awards.

Morreale, S. (2004). Learning Communities movement gains ground in communication discipline. *Spectra, 40*(2), 11–11.

National Center for Higher Education Management Systems. (2009). *Making opportunity affordable: Tennessee policy audit.* Boulder, CO.

National Survey of Student Engagement. (2006). Retrieved from http://nsse.indiana.edu/NSSE_2006_Annual_Report/docs/NSSE_2006_Annual_Report.pdf

Osborne, M., Marks, A., & Turner, E. (2004). Becoming a Mature Student: How Adult Applicants Weigh the Advantages and Disadvantages of Higher Education. *Higher Education: The International Journal of Higher Education and Educational Planning*, *48*(3), 291–315.

Pascarella, E., & Terenzini, P. (1991). *How college affects students: Findings and insights from twenty years of research.* San Francisco, CA: Jossey-Bass.

Pontes, M. C. F., & Pontes, N. M. H. (2012). Enrollment in Distance Education Classes Is Associated with Fewer Enrollment Gaps among Nontraditional Undergraduate Students in the US. *Journal of Asynchronous Learning Networks*, *16*(1), 79–89.

Retention. (2016). Department of Education.

Reyna, R. (2010). *Common College Completion Metrics*. National Governors Association. Retrieved from http://www.nga.org/files/live/sites/NGA/files/pdf/1007COMMONCOLLEGEMETRICS.PDF

Scott, L. M., & Lewis, C. W. (2011). Nontraditional College Students: Assumptions, Perceptions, and Directions for a Meaningful Academic Experience. *International Journal of Interdisciplinary Social Sciences*, *6*(4), 1–10.

Setftersten, R., & Lovegreen, L. (1998). Educational Experiences Throughout Adult Life New Hopes or No Hope for Life-Course Flexibility? *Research on Aging*, *20*, 506–538.

Spanier, G. (2001). The engaged university: Our partnership with society. Retrieved from http://president.psu.edu/speeches/articles/engaged.html

Strang, T. (2014, November 18). Student Engagement Insights survey. Retrieved from http://blog.cengage.com/nontraditional-students-attend-college/

Tabachnick, B., & Fidell, L. (2007). *Using Multivariate Statistics* (5th ed.). Pearson.

Taniguchi, H., & Kaufman, G. (2005). Degree Completion Among Nontraditional College Students. *Social Science Quarterly*, (4), 912.

The Association of Public and Land-grant Universities. (n.d.). *Project Degree Completion*. Retrieved from http://www.aplu.org/projects-and-initiatives/project-degree-completion/project-degree-completion-in-depth/

Thomas, K. (2001). *They're Not Just Big Kids: Motivating Adult Learners.* Presented at the Annual Mid-South Instructional Technology Conference, Murfreesboro, TN. Retrieved from http://files.eric.ed.gov/fulltext/ED463720.pdf

Tinto, V. (1987). *Leaving College: Rethinking the Causes and Cures of Student Attrition.* The University of Chocago Press Books.

Title I--Workforce Development Activities (2014). Retrieved from https://www.gpo.gov/fdsys/pkg/PLAW-113publ128/pdf/PLAW-113publ128.pdf

Tones, M., Fraser, J., Elder, R., & White, K. (2009). Supporting MAture-aged Students from low socioeconomic background. *Higher Education*, *58*(4), 505–529.

Undergraduate Enrollment. (2016). (The Condition of Education 2015). Retrieved from http://nces.ed.gov/programs/coe/indicator_cha.asp

University Professional and Continuing Education Association Center for Research and Consulting. (2012). *Measuring nontraditional student success: An imperative for colleges and universities.* Retrieved from http://www.insidetrack. com/wp-content/uploads/2013/09/insidetrack_upcea_measuringnontraditional-studentsuccess.pdf

U.S. Department of Education. (2016). *The Condition of Education 2016*. Retrieved from http://nces.ed.gov/pubs2016/2016144.pdf

U.S. Department of Education, National Center for Educational Statistics. (2012). *Digest of education statistics*. Washington, DC.

U.S. Department of Education, National Center for Education Statistics. (2015). *Annual Earnings of Young Adults* (The Condition of Education 2015) (p. 144). Retrieved from https://nces.ed.gov/fastfacts/display.asp?id=77

Wasley, P. (2006). Underrepresented students benefit most from “engagement.” Retrieved from https://tle.wisc.edu/forum/underrepresented-students-benefit-most-e ngagement

Wild, L., & Ebbers, L. (2002). Rethinking Studnet Retention in Community College. *Community College Journal of Research & Practice*, *26*(6), 503.

Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A Tangled Web of Terms: The Overlap and Unique Contribution of Involvement, Engagement, and Integration to Understanding College Student Success. *Journal of College Student Development*, *50*(4), 407.

Woodrow, M. (1988). The Access Course route to higher education. *Higher Education Quarterly*, *42*(4), 317–334.

Wyatt, L. G. (2011). Nontraditional Student Engagement: Increasing Adult Student Success and Retention. *Journal of Continuing Higher Education*, *59*(1), 10–20.

Young, K. M. (2002). *Retaining Underprepared Students Enrolled in Remedial Courses at the Community College*. Retrieved from eric.

APPENDIX A
Survey Permission Letter
Survey Permission

Robert Stubbs
University of Colorado
Director Institutional Research
3100 Marine Street, Bldg RL3
Boulder, CO 80303-0015

Mr. Stubbs:

I am a doctoral student from the University of Louisiana at Lafayette writing my dissertation titled *An Exploration of the Institutional Attributes that Contribute to the Success of Nontraditional College Students* , under the direction of my dissertation committee chaired by Dr. Dianne Olivier, who can be reached at dolivier@louisiana.edu.

I would like your permission to use the Nontraditional Student Survey (Fall 1997) instrument in my research study. I would like to use and print your survey under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send a copy of my completed research study to your attention upon completion of the study.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail: nmm0312@louisiana.edu. If permission is granted, I would be interested in learning about the development and validation of the measure. Please provide direction as to where I can secure the background information.

Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

Robert Stubbs
University of Colorado
Director Institutional Research
3100 Marine Street, Bldg RL3
Boulder, CO 80303-0015

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Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

Permission granted O Unable to grant permission

Signature

Director of Institutional Research

Title

Robert B. Stubbs

11 November 2016

Date

Date

Dr. Valjean Wright
Harcum College
Perkins Coordinator
750 Montgomery Ave.
Bryn Mawr, PA 19010-3476

Dr. Wright:

I am a doctoral student from the University of Louisiana at Lafayette writing my dissertation titled *An Exploration of the Institutional Attributes that Contribute to the Success of Nontraditional College Students*, under the direction of my dissertation committee chaired by Dr. Dianne Olivier, who can be reached at dolivier@louisiana.edu.

I would like your permission to use A Survey of Needs and Services for Postsecondary Nontraditional Students instrument in my research study. I would like to use and print your survey under the following conditions:

- I will use the surveys only for my research study and will not sell or use it with any compensated or curriculum development activities.
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Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

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Harcum College
Perkins Coordinator
750 Montgomery Ave.
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Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

Permission granted O Unable to grant permission

V. Wright
Signature

VALJEAN WRIGHT

Perkins Grant Coordinator
Title

11-29-16
Date

APPENDIX B
Research Study Consent letters
Participant Consent Letter

Dr. Michael Glisson
South Louisiana Community College
Vice Chancellor, Strategic Initiatives
Devalcourt Building Room 236
1101 Bertrand Drive
Lafayette, La 70506

I am a doctoral student in the Educational Leadership Doctoral Program at the University of Louisiana at Lafayette in Lafayette. I am studying the institutional factors that contribute to the success of nontraditional students in higher education. My research is under the supervision of Dr. Dianne Olivier. The goal of my study is to gather data about the services students are currently using and those they wish would be available. My research will focus on services such as tutoring, extended hours, advising and the library. As vice chancellor of South Louisiana Community College, I am requesting your permission to contact students by means of their email address. I am seeking to gain voluntary participation from all students aged twenty-five or older. Students are under no obligation to participate in this study. At any time, the participants may elect to withdraw from the study without any penalty for choosing not to participate or withdrawing from the study. Participation will remain completely anonymous. The results of this study will be available for you and your staff to use at your discretion. My results will serve as a reference for future studies as well as campus programming and for a better understanding of the needs of this population. The results may also be published in an academic journal, or be presented at a conference. Only aggregate data would be reported.

If you agree to participation of SLCC students, please sign the consent form for approval. Any consideration and favorable consent is greatly appreciated. I look forward to the opportunity to work with your students as they provide a better insight on institutional factors that contribute to the success of nontraditional students. If you have any questions or concerns you may contact me directly at 337-212-7183 or nmm0312@Louisiana.edu, should you have any questions about me please contact, Dr. Dianne F. Olivier, Supervising Professor at 337-482-6408 or dolivier@louisiana.edu.

Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

Lisa Lord
University of Louisiana at Lafayette
Director, Institutional Research
Martin Hall Room 336
104 University Circle, Lafayette, LA 70503
P.O. Drawer 41732

I am a doctoral student in the Educational Leadership Doctoral Program at the University of Louisiana at Lafayette in Lafayette. I am studying the institutional factors that contribute to the success of nontraditional students in higher education. My research is under the supervision of Dr. Dianne Olivier. The goal of my study is to gather data about the services students are currently using and those they wish would be available. My research will focus on services such as tutoring, extended hours, advising and the library. As director of institutional research of University of Louisiana at Lafayette, I am requesting your permission to contact students by means of their email address. I am seeking to gain voluntary participation from all students aged twenty-five or older. Students are under no obligation to participate in this study. At any time, the participants may elect to withdraw from the study without any penalty for choosing not to participate or withdrawing from the study. Participation will remain completely anonymous. The results of this study will be available for you and your staff to use at your discretion. My results will serve as a reference for future studies as well as campus programming and for a better understanding of the needs of this population. The results may also be published in an academic journal, or be presented at a conference. Only aggregate data would be reported.

If you agree to participation of University of Louisiana at Lafayette students, please sign the consent form for approval. Any consideration and favorable consent is greatly appreciated. I look forward to the opportunity to work with your students as they provide a better insight on institutional factors that contribute to the success of nontraditional students. If you have any questions or concerns you may contact me directly at 337-212-7183 or nmm0312@Louisiana.edu, should you have any questions about me please contact, Dr. Dianne F. Olivier, Supervising Professor at 337-482-6408 or dolivier@louisiana.edu.

Sincerely,

Nicole Davis
University of Louisiana at Lafayette
Doctoral Candidate

Research Consent Form

You are being invited to participate in a research project by Nicole Davis, doctoral candidate, from the University of Louisiana at Lafayette. This study will be conducted to determine institution attributes that contribute to the success of nontraditional students in traditional four-year colleges and community colleges. You were selected to participate in this study because you are an undergraduate student at the University of Louisiana at Lafayette or South Louisiana Community College.

You will be asked to answer survey questions related to your university or community college experiences. The survey will take approximately approximately 15-20 minutes.

You are under no obligation to participate in this research. You may withdraw from the survey at any time. There is no bias or penalty from the University of Louisiana at Lafayette or South Louisiana Community College if you decide not to participate or if you choose to stop participating in the research.

There is no particular benefit to participation, however the researcher may learn information related to the institutional attributes that contribute to the success of nontraditional students. This project may allow important research to be completed for nontraditional students in the future. The major risk to you is the inconvenience of time to complete the survey. Once the survey is complete, there are no other obligations required.

The results of this research may be published in a professional journal, as well as shared with the University of Louisiana at Lafayette and South Louisiana Community College. No personal information will be included in any reports. The survey you are completing today will be destroyed after all data have been analyzed and the research is complete. You will not be asked for your name or any other identifying information. If you have any questions about this research or your participation in the study, you are welcome to contact the researcher Nicole Davis at nmm0312@louisiana.edu or the research advisor Dr. Dianne Olivier at dolivier@louisiana.edu . If you have any questions concerning the protection of human subjects in research, please contact Dr. David Yarbrough, UL Lafayette IRB Chair at irb@louisiana.edu. We will make every effort to answer your questions.

APPENDIX C
Nontraditional Student Survey

Nontraditional Student Survey

1. If you agree to the above terms, click yes, providing consent of your willingness to participate in the survey.

- o Yes
- o No

2. What institution do you attend?

- o University of Louisiana at Lafayette
- o South Louisiana Community College

3. What is your academic status?

- o in a degree program full-time
- o in a degree program part- time

4. What is your gender identity?
- o Female
- o Male
- o Transgender FTM (female-to-male)
- o Transgender MTF (male-to-female)
- o Non-binary/gender fluid
- o Not sure
- o Prefer to self-describe (please specify): _____
- o Prefer not to say

5. Which racial or ethnic group(s) do you most identify?
- o African-American (non-Hispanic)
- o Asian/Pacific Islanders
- o Caucasian (non-Hispanic)
- o Latino or Hispanic
- o Native American or Aleut
- o Other

6. Have you attended a university before?
- o Yes
- o No

7. Have you served in the military?
- o Yes
- o No

8. How long have you been enrolled in your particular program?
- one semester
- two semesters
- three semesters
- four semesters
  - five semesters
  - six semester
  - seven semesters
  - eight semesters
  - longer than eight semesters

9. What is your educational goal?
   - Certificate
   - Technical diploma
   - Associate's degree
   - transfer to 4-year school
   - Bachelor’s Degree

10. When do you attend classes?
    - attend day classes only
    - attend night classes only
    - attend weekend classes
    - attend online classes
    - attend a mix of the above

11. What are the reason(s) you chose to attend this college?
    - convenient school calendar
    - offer online courses
    - offered evening /weekend classes
    - quality of the program
    - affordable tuition
    - scholarship or loan opportunity
    - child care on campus
    - campus safety
    - job placement potential
    - convenient location
    - the reputation of the school
    - tired of being on a program waiting list at another school
    - none of the above

12. When did you enroll in the college?
    - enrolled in college right after high school

- attended another college right after high school and transferred
- delayed education for at least one year after high school

13. Have you taken remedial courses?
    - Yes
    - No

14. Do you work outside of school?
- Yes
- No

15. What is your employment status?
- work full -time
- work part-time
- unemployed but looking for work not planning to work while in school
- not planning to work while in school

16. How many hours a week do you work?
- 10-15 hours
- 15-20 hours
- 20-25 hours
- 25-30 hours
- 35 or more

17. How old are you?
- 19 or under
- 20-29
- 30-39
- 40+

18. Are you financially independent? Please check all the apply.
- Both my parents are deceased, I am a ward of the court, in foster care or was a ward of the court when 13 years or older;
- I am a veteran of the Armed Forces of the United States or serving on active duty for other than training purposes;
- I am a graduate or professional student;
- I am a married individual
- I have legal dependents other than a spouse
- I am an emancipated minor or in legal guardianship
- I am a homeless youth

19. Do you have dependents?
- Yes

- No

20. Do you have children?
- Yes
- No

21. How many children do you have?
    - 1
    - 2
    - 3
    - 4 or more

22. How old are your children? Check all that apply.
    - Daycare age (newborn-2 years old)
    - Preschool age (3 - 4 years old)
    - Elementary school aged (5-10 years old)
    - Middle school aged (11-14 years old)
    - High School aged (14-18 years old)
    - Adults (18 years old or older)

23. What are the challenges that you face in completing this program?
    - caring for a family while in school
    - lack of support from family and peers
    - children (sickness, daycare)
    - financial problems
    - the need to work while in school
    - time constraints
    - transportation to and from school
    - the difficulty of the coursework
    - not enough online courses
    - lack confidence in my own abilities
    - an inconvenient class schedule
    - an inconvenient academic calendar
    - the need for more study skills
    - inadequate reading, English and math skills
    - difficulty relating to my classmates
    - none of the above

24. What is your current family status?
    - single
    - single parent
    - married
    - married with children

- Separated
- Divorced
- displaced homemaker (have care of a family but no support and difficulty finding work)

25. What is your highest level of educational attainment?
- high school graduate
- GED or High school equivalency diploma
- certificate of completion
- hold a postsecondary degree

26. What are your technology needs?
- have computer access at home
- own a laptop
- depend on the computers/ computer lab at school

27. What services have you used at your college? Check all that apply.
- career services
- counseling services (student initiated)
- counseling services (college or faculty initiated)
- Face to face tutoring services
- Online tutoring services
- student employment services
- the library
- computers or laptops on campus
- child care services
- financial aid services
- Student Emergency Fund (bus passes, gas cards or small loan)
- none of the above

28. Have you had a conversation with a faculty member outside of class?
- Yes
- No

29. Do you work regularly with a faculty member outside of class?
- Yes
- No

30. Have you participated in study or discussion groups?
- Yes
- No

31. Have you organized off-campus study opportunities?

- Yes
- No

Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
32. I would like my college to offer more summer and/ or evening classes.							
33. I would like my college to offer more online classes.							
34. I would like my college to offer smaller classes.							
35. I would like my college to offer more modern facilities.							
36. I would like my college to offer career counseling.							
37. I would like my college to offer extended hours for career counseling.							
38. I would like my college to							

Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
offer counseling services.							
39. I would like my college to offer extended hours for counseling services.							
40. I would like my college to offer extended hours for advising.							
41. I would like my college to offer extended office hours for professors and instructors.							
42. I would like my college to offer ability to video conference or phone conference with faculty and staff.							
43. I would like my college to offer face to face tutoring services.							
44. I would like my college to offer extended hours for face to face							

Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
counseling services.							
45. I would like my college to offer online tutoring services.							
46. I would like my college to offer student employment services.							
47. I would like my college to offer extended library hours.							
48. I would like my college to offer library resources online.							
49. I would like my college to offer a computer lab on campus.							
50. I would like my college to offer extended hours for the on campus computer lab.							
51. I would like my college to offer child care services.							
52. I would like my college to offer more affordable							

Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
child care on campus.							
53. I would like my college to offer financial aid services.							
54. I would like my college to offer lower tuition rates or more help with tuition needs through scholarships, aid, and/or work study.							
55. I would like my college to offer Student Emergency Fund (bus passes, gas cards or small loan).							
56. Have you participated in informal social events with other students?							
57. How likely are you to seek advice on choosing courses?							
58. How likely are you to get advice on							

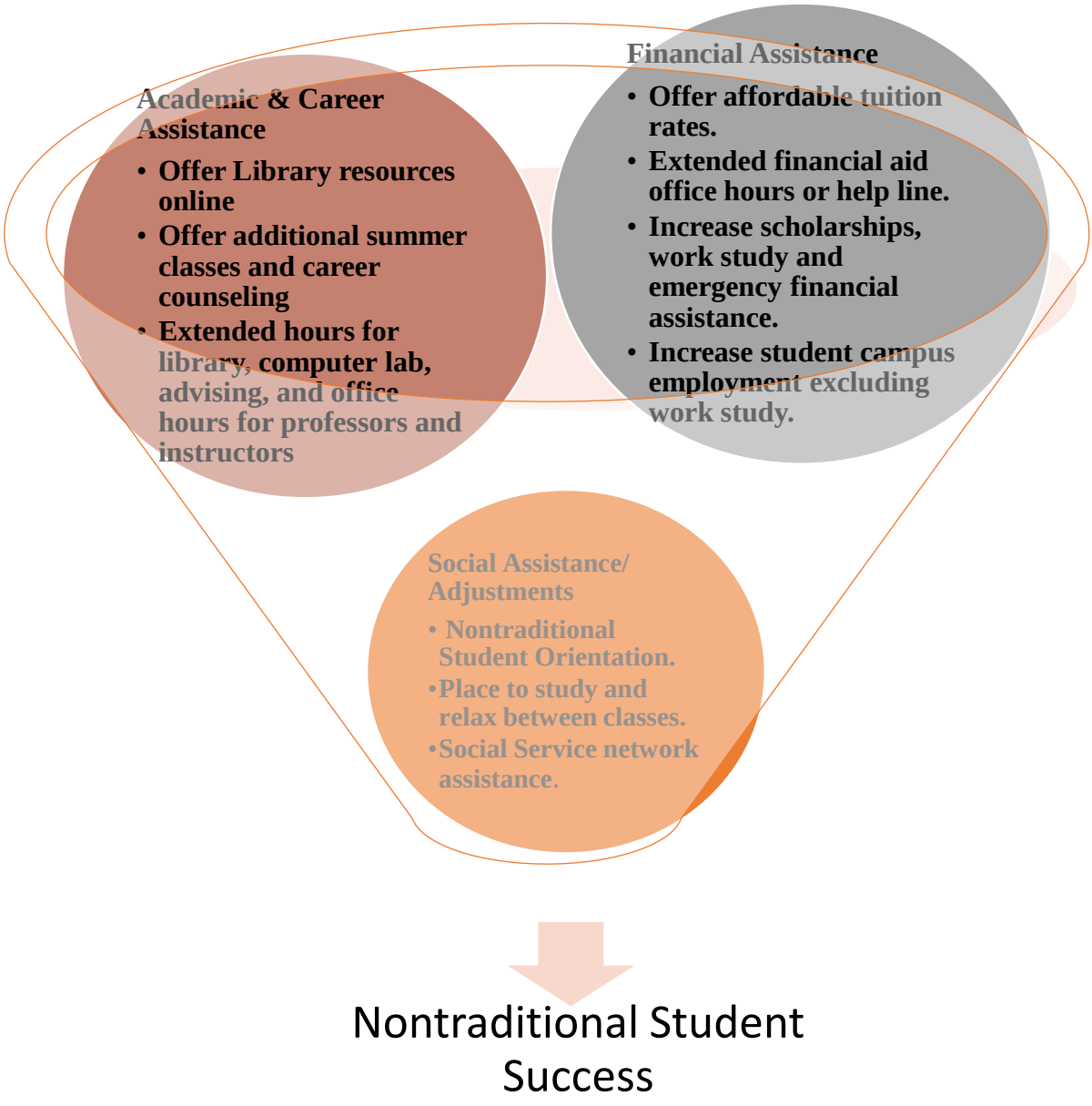
Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
careers?							
59. How likely are you to take an active part in what goes on in your classes?							
60. How likely are you to interact with instructors outside of class?							
61. How likely are you to develop friendships with others in your classes?							
62. How likely are you to get to know persons of different racial/ethnic backgrounds?							
63. How likely are you to get to know other non-traditional students?							
64. How likely are you to participate in social							

Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
activities on campus?							
65. How likely are you to be involved in extracurricular activities (clubs, organizations, student government)?							
66. How likely are you to use campus services and offices in evenings and/or on week-ends?							
67. How likely are you to participate Campus events?							
68. How likely are you to find a place to study between classes?							
69. How likely are you to find a place to relax between classes?							
70. How likely are you to ask for financial							

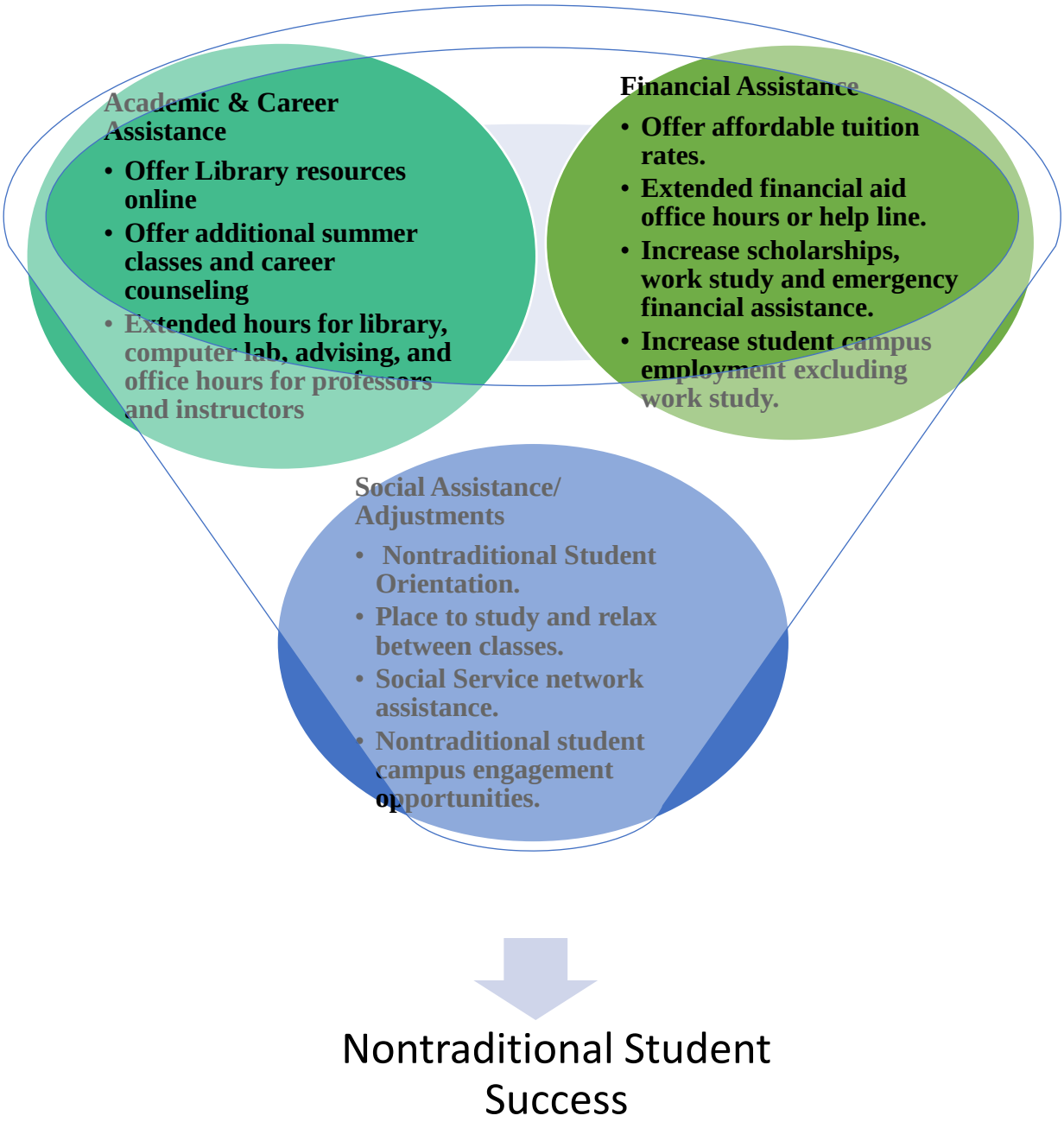
Questions	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	N/A
assistance when needed?							
71. How likely are you to ask for transportation assistance when needed?							

APPENDIX D
Davis Model for Nontraditional Student Success

Davis Model for Nontraditional Student Success for Community Colleges



Davis Model for Nontraditional Student Success for Traditional Four - Year Institutions



Davis, Nicole Morrison Bachelor of Science, University of Louisiana at Lafayette, Fall 2003;
Bachelor of Arts, University of Louisiana at Lafayette, Spring 2006; Master of Science in Counselor Education, University of Louisiana at Lafayette, Spring 2012; Doctor of Education, University of Louisiana at Lafayette, Spring 2017
Major: Educational Leadership
Title of Dissertation: A Quantitative Study of Institutional Attributes that Contribute to Success of Nontraditional Students in Traditional Four-Year Universities and Communities Colleges Dissertation Director: Dr. Dianne F. Olivier
Pages in Dissertation: 200; Words in Abstract: 177

ABSTRACT

Nontraditional student enrollment in institutions of higher education has steadily risen in the past twenty years. Studies predict that this trend will continue in the next ten years. With emphasis on retention and competition, universities must focus their attention on their nontraditional students. The overarching research question the guided the research is: What are the institutional factors contributing to the success of nontraditional students? Thus, the purpose of this dissertation was to do the following: identify the college services used by nontraditional students in higher education; determine services nontraditional students express that they desire, but that are not available in higher education institutions; determine how actively engaged nontraditional students are on college campuses; determine to what extent nontraditional students who attend traditional four-year institutions desire different services than those nontraditional students who attend community colleges do; and identify to what extent nontraditional students who attend traditional four-year institutions differ in their degree of campus involvement from those nontraditional students who attend community colleges.

Key words: nontraditional students, college success, mature students, completion, retention, community colleges, four-year institutions.

BIOGRAPHICAL SKETCH

Nicole Morrison Davis was born on June 15, 1981 to Wilfred and Barbara Morrison, both Louisiana natives. On November 21, 2009, she married Terrence Davis, and later had one son, Trent Davis.

Nicole graduated in 1999 from Northside High School, located in Lafayette, Louisiana. She holds a bachelor of science in athletic training and a bachelor of arts in elementary education, grades 1-6, which she received from the University of Louisiana at Lafayette. She later attained a Master of Science in Counselor Education.

Nicole has been employed with the Lafayette Parish School System since 2006, and has served in a number of professional positions. She has been a classroom teacher and a counselor. Currently, Nicole is an adult education program coordinator in Lafayette Parish School System. This program assists parents obtain their high school equivalency diploma.

The degree of Doctor of Education was conferred during Spring Commencement on May 12, 2017.